This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

NYPL RESEARCH LIBRARIES
3 3433 08240227 6

ANNEX

Digitized by Google

Digitized by Google

Digitized by Google

Digitized by Google

THE

English Bowman,

OR

TRACTS ON ARCHERY:

TO WHICH IS ADDED

THE SECOND PART

OF THE

BOWMAN's GLORY.

By T. ROBERTS,

A MEMBER OF THE TOXOPHILITE SOCIETY.

Thus thou peculiar Engine of our Land!
(Weapon of Conqueſt! Maſter of the Field!)
Renowned Bow! (that mad'ſt this Crown command
The Tow'rs of France, and all their Pow'rs to yield)
- -
- -
Thou firſt did'ſt conquer us; then rais'd our ſkill
To vanquiſh others:——————
And now how com'ſt thou to be out of date,
And all-neglected leav'ſt us, and art gone;
And with thee th' ancient ſtrength, the manly ſtate
Of valour and of worth, that Glory won?
Or elſe ſtay'ſt thou till new-priz'd Shot abate,
(That never ſhall effect what thou haſt done)
And only but attend'ſt ſome bleſſed Reign,
When thou and virtue ſhall be grac'd again?

DANIEL. *Hiſt. of the Civil Wars*, B. 8.

LONDON:

PRINTED FOR THE AUTHOR,

By C. Roworth, Hudson's Court, Strand.

Sold by Mr. EGERTON, at the Military Library, Charing Croſs;

Alſo by Mr. WARING, at his Archery Ware-Room, Caroline Street, Bedford Square.

1801.

Digitized by Google

Digitized by Google

TO

His Royal Highness the

PRINCE OF WALES,

Patron;

Mrs Crespigny,

PATRONESS;

His Grace the Duke of Bedford,

President;

THE VICE PRESIDENTS,

& other Members of the

TOXOPHILITE SOCIETY;

And To

All other Societies of Archers,

IN

GREAT BRITAIN & IRELAND;

These Tracts,

Are, with great respect, dedicated,

By a Brother Archer,

and Toxophilite,

SR.

London
June 1801.

Neele sc. 352 Strand.

Digitized by Google

NEW YORK
PUBLIC
LIBRARY

Digitized by Google

PREFACE.

THE following tracts originated in notes, collected by the author for his amuſement and inſtruction in matters relative to archery; and which (having been peruſed by thoſe, whoſe ſuperior knowledge and proficiency in the art entitle their opinions to very high reſpect, and by them deemed of more importance, than the author annexed to them) he has been induced to arrange and methodiſe; and by throwing them into a connected form, has endeavoured to render them of public utility: much priſing archery himſelf, and deſirous of contributing his mite towards the ſupport and encouragement of an art, which requires only to be more generally known, and rendered more familiar, to become univerſally adopted and eſteemed. A further encouragement to him in the undertaking, was the recollection, that although the revival of archery, at the cloſe of the eighteenth century, had produced ſome ſmall publications (1) upon the ſubject; yet, that

(1) *The Anecdotes of Archery* by the *Rev. G. Oldfield.* And another publication under the ſame title, by *E. Hargrove.* Theſe works chiefly contain ſhort Extracts from *Groſe's Military Hiſtory of Great Britain*, and *Stow's Survey of London*; with ſome account of bugle horns; and a liſt of the preſent ſocieties of archers.

Digitized by Google

thoſe publications profeſſed to be only anecdotes, and conſequently (notwithſtanding their merits and the amuſement they may afford to the archer) fell very far ſhort of any *treatiſe* upon the art, as well as of encouraging it, by clearing the path which led to the *practice* of it. Mr. Moſeley, indeed, by far the moſt conſpicuous of modern writers upon archery (whoſe performance is marked with much reſearch and juſt obſervation) has evidently taken a very extended view of archery, ancient and modern, throughout the world; and has not tied himſelf down to an account of the particulars or practice of it in this country, beyond what was conſiſtent with his *general* plan. Upon the ſubject of practical archery in England, we have but one writer (Roger Aſcham) who lived in the reigns of Henry VIII. and Elizabeth, and who, as he himſelf informs us, wrote the *firſt* Treatiſe upon Engliſh Archery.

The Perſians, we are told *(See the Preface to Moſeley, p. 5)* poſſeſs treatiſes upon the art, as practiſed by them, written in very early times. The Emperor Leo, in his Tactics, has given a few hints upon this ſubject: and Vegetius (in his work *De Re Militari)* ſlightly notices the practice of this art. Why *we* have not any writer upon archery, prior to Aſcham, is by him thus accounted for. "And, that "no man hitherto hath written anye booke of ſhot-"ing, the faulte is not to be layed in the thyng, "which was worthie to be written upon: but of "men, which were negligent in doynge it; and this "was the cauſe thereof, as I ſuppoſe. Menne that

"uſed

" uſed ſhooting moſte, and knewe it beſt, were not " learned: men that were learned, uſed little ſhoot- " ing, and were ignorant in the nature of the thynge; " and ſo fewe men hath bene, that hitherto were able " to wryte upon it."

Although in this kingdom

——————There are
" Whom ſtill the meed of the green archer charms."
Armſtrong. Art of preſerving Health. B. iii.

yet, are there many, who have ſcarcely heard of ſuch an exerciſe as that of the bow: and others, who may occaſionally have ſeen that inſtrument in the hands of an archer; and yet are total ſtrangers to its peculiar and valuable qualities. And, there are not a few, who ſhew that reſpect and veneration for the bow, and that propenſity to take it up, which, Aſcham obſerves, is ſo *natural to the Engliſh nation*. Yet, as he tells us, " becauſe they knowe not whiche " waye to houlde to come to ſhootinge, have " cleane turned themſelves from ſhootinge." To encourage ſuch perſons to engage in the practice of an art, which promiſes to reward their labours, with health, pleaſure, ſatisfaction and applauſe; and to aſſiſt their attempts to become proficients in it, is the author's chief aim.

Aſcham had more extended views in writing his treatiſe, adapted to the times in which he lived: namely, the ſervice of his Prince, who ſtrove to encourage the art for military purpoſes, and of his Countrymen, by reminding them of the honour and value of it in the field; and an earneſt deſire to

Digitized by Google

check, as far as juſt reaſoning and honeſt perſuaſion would go, the baneful influence of, among other vices of the times, that of gambling (which, we may collect, from his manner of expreſſing himſelf, was carried to a moſt lamentable height); and to ſubſtitute an honourable, healthful and manly amuſement. This treatiſe of Aſcham's, although, in ſome particulars, it appears to us defective as a Treatiſe upon the Art of Archery; yet is it found to be extremely uſeful to thoſe who wiſh to become ſcientifically acquainted with the art. Upon the late revival of archery, it was reprinted, from an edition of his whole works by Bennet in 1761, with two or three trifling notes, that confeſs the inability of the annotator to explain this part of his author's work. Aſcham was a man of great learning and (as his Biography informs) was not only the chief ornament of a celebrated college in the univerſity, but viſited foreign countries, frequented courts, and lived in familiarity with ſtateſmen and princes; not only inſtructed ſcholars in literature, but formed Elizabeth to empire. He had too the honour and good fortune to be tutor to Lady Jane Gray. *See Bennet's Preface to Aſcham's works, and the Biographia.* It was the faſhion of the times, in which he lived, to write in the Greek or Latin language; but he wrote his *Toxophilus* (2) (for ſo he ſubſcribes his Treatiſe on Archery) in the Engliſh tongue, for which he gives

(2) The *Toxophilus* has undergone two editions, ſubſequent to its firſt publication in 1544, and previous to the edition of Aſcham's works by Bennet, viz. in 1571, 1589. It was reprinted at *Wrexham*, 1788.

the

Digitized by Google

the following reaſon. " If any man would blame " me, eyther for takinge ſuch a matter in hande, " or els for writing it in the Engliſhe tongue, this " anſwere I may make to him; that whan the beſte " of the realme thinke it honeſt for them to uſe, I, " one of the meaneſt ſorte, ought not to ſuppoſe it " vile for me to write: and though to have written " it in another tongue, had bene both profitable for " my ſtudy, and alſo more honeſt for my name: yet I " can thinke my labour well beſtowed, yf with a little " hindraunce of my profyt and name, maye come " any fourtheraunce to the pleaſure or commoditie of " the gentlemen and yeomen of Englande, for whoſe " ſake I tooke this matter in hand." Another object with him was (as he gives us to underſtand) to bring into repute and purify the Engliſh language. And his performance was, no doubt, at the time, an ornament to it: but, at this day, his phraſeology ſtands in need of much explanation, to make it intelligible. This treatiſe alſo wears a very forbidding aſpect on another account; being written in queſtion and anſwer, and in the Socratic ſtyle of diſputation, (replete with arguments and ſimilies of conſiderable length, often digreſſing largely from the ſubject matter, and not unfrequently involving that, as it were, in a cloud of excentric and often apparently trifling reaſoning) it has been found by much too tedious and dry a publication for thoſe, who either are not admirers of antique literature; or who wiſh to have the thread of the ſubject they are in purſuit of unbroken; or who have not ſufficient leiſure

Digitized by Google

to purſue it through the unintereſting mazes of quaint diſſertation.

Theſe circumſtances induced the author of the following publication to conſider, in what manner he could render this part of his work moſt acceptable to the generality of readers, and more conformable to his plan. To have republiſhed the *Toxophilus* with explanatory notes (many of which muſt neceſſarily have been very prolix) would, he conceived, tend much to diſtract the attention of the reader. And, as archery had undergone ſome alteration, ſince the time when Aſcham wrote, he apprehended, that the readieſt way to make his deſign intelligible, eaſy and acceptable, was to throw the text and comment together, leaving little to follow by way of note. And, to prevent the idea, that he had arrogated to himſelf what was the production of Aſcham, he has not failed to mark every ſentence, which he has extracted from the *Toxophilus*, with inverted commas; a method he has adopted with reſpect to his quotations from other authors: to which he has alſo, in general if not always, obſerved to annex their names.

In attempting to *methodiſe* the *Toxophilus*, he found he had engaged in an undertaking of ſome difficulty. This Treatiſe on Archery may, with juſtice, may be compared to a *diſſected puzzle*, conſiſting of many very differently formed parts; which, when rightly connected, form one complete and regular figure: or, to a number of alphabetical letters thrown *promiſcuouſly together*, but which, when properly arranged, diſcover a regular and finiſhed compoſition;

Digitized by Google

tion; and which are left for the reader to exercise his wit, in the putting them together. However, he has studied to make the business easy to his readers, by collecting and arranging the variety of little hints upon the art, which are to be found greatly dispersed in the *Toxophilus*, and often inveloped in the subtilties of logical discussion; and to methodise and reduce them into some kind of regularity and system. For which purpose, he has varied from the plan of that work, which only divided the treatise into two parts; and he has, throughout, made use of *chapter* and *section*, and arranged the subject matter accordingly. This method will be found to answer, tolerably well, the purpose of an *Index*; for, the heads of every chapter and section being somewhat full and explanatory, will become an easy guide to any particular part of the Comment upon the *Toxophilus*. And, as this plan is adopted throughout the following tracts, the reader will thereby have a pretty accurate view of the whole work. Besides, the author found it necessary, not only to change the old orthography for the modern, but also to explain, and, sometimes, *translate* whole sentences; which, though suited to the quaintness of the time in which Ascham wrote, are not well adapted to the present. Beyond these necessary liberties, he has made but little alteration in the grammatical part of the composition; occasionally, only, inserting between crotchets, a word or two by way of explanation: And, to satisfy *curiosity* and raise a *smile*; he has quoted some few of the more remarkable passages in their original form and dress.

Digitized by Google

The author muſt here, indeed, obſerve, he had been given to underſtand, that a Treatiſe upon *Archery* had been written ſince the *Toxophilus*, by Gervaſe Markham, (publiſhed in the year 1634). To this work, therefore, he was eager to refer; conceiving that it would either ſuperſede the neceſſity of his intended collections from the *Toxophilus*; or, at leaſt, ſave him much labour in the undertaking. With ſome pains he got acceſs to the book (which, at this time, is a very ſcarce Tract); but he found himſelf greatly diſappointed and deceived, and felt not a little indignation againſt the author and his performance, when he diſcovered, that it was a mere extract from Aſcham, without any kind of comment or explanation: yet, with matchleſs effrontery, diſplaying a manifeſt endeavour to *conceal* the name of the original compoſer, and to transfer the language and merits of the *Toxophilus* of the learned Aſcham to Mr. *Gervaſe Markham*.

To render this part of his publication more complete, the author has added to the *Toxophilus* ſeveral chapters; conſiſting of matters either totally unnoticed, or but very ſlightly touched upon by Aſcham. And he has ſubjoined an account of the *different kinds* of ſhooting, and given the various *rules* applicable to each, which he preſumed would not be unacceptable; particularly to young archers and thoſe who may wiſh to form themſelves into ſocieties, and to regulate them according to the cuſtomary and eſtabliſhed rules.

After giving this reaſon, for having entered ſo much into

Digitized by Google

into the *minutiæ* of practical archery; he has only to obſerve, that he has endeavoured to avoid the error of becoming obſcure by too much brevity; and poſſibly may have run into the oppoſite extreme. Upon the whole his object has been to execute his performance with fidelity and correctneſs, and he has been particularly, careful, not to omit any part or word in the *Toxophilus*, which could tend to elucidate his ſubject. In peruſing the *Art of Archery*, the reader will frequently ſtumble upon *terms of art*. Aſcham tells us, "he muſt uſe *archers* words." To make theſe terms familiar and intelligible, the author has added a Gloſſary or Explanation.

With reſpect to his Comment upon ſome parts of the *Toxophilus*, particularly on thoſe points which are now termed *Aſcham's five Points of Archery*, he feels great diffidence, and entertains much doubt of a ſucceſsful endeavour: and, therefore, cannot but make avowal and apology for the imbecility of his pen; which indeed, muſt frequently manifeſt itſelf in that and various other parts of the following Tracts. To have left them in the unexplained ſtate in which Aſcham has given them, would not be ſatiſfying the nature of a Comment: and as the want of an enlarged Comment has long been complained of, the author determined to do his beſt towards ſurmounting the difficulty of the taſk.

All *arts*, we know, are more properly the ſubjects of *imitation*, than of deſcription: at leaſt, ſo far as relates to the *minutiæ* of them, to *manual operation*, and, in particular to *corporeal attitudes*: to expreſs which, both

Digitized by Google

both the pen and the pencil are, even in the hands of the firſt maſters, often found to be very inadequate; and fail to become ſatisfactory. In the operations alluded to, there is ſubjoined to great dexterity a peculiar method and *ſtyle* of action, that often cannot be taught but by *example*. To theſe cauſes muſt, in a great meaſure, be attributed the loſs of ſome former arts. It was the difficulty of conveying a clear and ſatisfactory explanation, which ſeems to have deterred Aſcham (whoſe learning and knowledge of archery might well have qualified him for the taſk) from giving us a greater inſight into this part of the art: for, we find him frequently obſerving, that ſuch nicety of action was more "*pleaſant to behold than eaſy to be taught—not* "*ſo difficult to be followed in practice, as to be de-*"*ſcribed.*" And, ſpeaking of *ſhooting well*, he obſerves, "I can teach you to ſhoote faire, even as So-"crates taughte a man ones to know God; for, "when he aſked him what was God, Nay, ſayth he, "I can tell you better what God is *not*: as God is "not ill, God is unſpeakable, unſearchable, and ſo "forth; even likewiſe I can ſay of faire ſhootinge." Following this rule, he has given us a ſort of *negative* or *reverſed* inſtruction: pointing out the faults, and leaving us to extract from them the excellencies and perfection, of an archer; and, cloſing his obſervations, by a reference to the archer, and an admonition to ſtudy from *life*. In theſe days, the practice of archery differs, in ſome reſpects, from the archery of former ages: and, from the partial attention now paid

Digitized by Google

paid to it, the *principles* of the art do not ſeem to be thoroughly underſtood, or perfectly aſcertained and ſettled; and conſequently, we ſometimes find, that opinions upon the ſubject claſh, and by turns outweigh each other. Indeed, it muſt be obſerved, that many experiments in archery yet remain untried. Every man is too apt to flatter himſelf, and to think that method the beſt, by which he beſt ſucceeds. But ſuch an opinion is founded in ſhort-ſightedneſs and narrow judgment. And, we are too much inclined to diſplay our own weakneſs, by condemning or ſetting at naught what is not ſuited to our confined comprehenſion; and often ſuppoſe, that in this age every thing is better done than it was in the laſt: and beyond that, we think we diſcern great error and ignorance. Although this remark does not want foundation, yet, the hackneyed phraſe, "that "every age improves upon the laſt," may *ſometimes* be miſapplied. To bring theſe obſervations to our ſubject (archery). We are very unwilling to admit, and are often tempted to *deny* the excellence and feats of archery noticed in former times; becauſe we neither ſaw any ſuch inſtances of it ourſelves; nor have we, after many attempts, attained to ſuch excellence. Without digreſſing further into argument upon the occaſion, one remark occurs; namely, that the knowledge of a few years ſhould be cautiouſly ſet up againſt the experience of *ages*. And we ſhould be ſomewhat inclined to allow, that we may not yet have *recovered* all the knowledge, principles and methods, under which archery was purſued by our anceſtors. The

author

Digitized by Google

author of the following Tracts has dwelt longer upon theſe obſervations, than, perhaps, was neceſſary; leſt, by apparently leaning to the practice of *modern* archery, and ſetting forth the examples of a few good archers of this day, he ſhould be charged with having moderniſed this *ancient* art too much. But, certainly, archery, and the cauſe of its practice, have greatly changed ſince Aſcham wrote. We ſhoot ſhorter diſtances—uſe weaker bows, and ſtudy more preciſion, than our anceſtors did. And, although the author is aware, that there are, in theſe days, men of great genius and ingenuity, who, being ſatisfied that archery is an art very difficult in nice performance, have not merely taken it up, but alſo have made it a *critical ſtudy and ſevere labour*; and who have, in their practice, ſomewhat ſwerved from the opinions of thoſe, who derived their knowledge in the art, from the remnant of the *old* Engliſh archers: yet, he is ready to confeſs, his inclination leads him to think, that could our forefathers riſe again and become our inſtructors, it may, at leaſt, admit of a doubt, whether, in teaching archery, even under its preſent reſtraints, they would not ſupport the *old* practice, by well founded *reaſons* and *convincing experiment*.

To thoſe who have ſeen *Mr. Anderſon* ſhoot, it will immediately occur, that theſe obſervations advert particularly to his *ſtyle* of ſhooting; which has been by ſome (and very ſucceſsfully) followed of late. To thoſe who have not, further explanation may be neceſſary. In the laſt of the following Tracts, which contains the *Practice of Archery*, the

Digitized by Google

the reader will find it noticed, that, of late years, *two* fingers only had been, by many, uſed in drawing the ſtring; and that ſeveral archers held their bows in an *oblique* direction or *ſomewhat* flattened. Theſe two points particularly mark the ſhooting of Mr. Anderſon; who obtained his knowledge of archery in Flanders: but it ſhould be obſerved, that the Flemings ſeldom ſhoot any diſtance *beyond one hundred yards*. Mr. Anderſon took up the bow at a very early age, and from that period has made it a conſtant exerciſe: and he is ſaid to have found no rival in his practice of archery, either in England, Scotland, or Flanders. But, when it is ſaid, he has found no *rival*, it muſt alſo be added, as far as Flemiſh archery (that is, in point of *diſtance*) extends. For, his ſhooting has been confined to the *target* and *butt*. Mr. Anderſon ſhoots with a bow rather weak, yet ſuited to his ſtrength and the Length he ſhoots: he has an excellent eye, and poſſeſſes an eaſy, ſteady and ſharp looſe. Upon the whole, he is allowed to be an incomparable archer.

In one part of the following Tracts (Part II.) it will appear, that the author has noticed archery, not only as a moſt gentlemanly recreation, and an exerciſe capable of affording the amuſement of an hour; but as poſſeſſing in itſelf ſome valuable incidents, particularly in its tendency to promote and reſtore *health*, and to increaſe and invigorate the muſcular powers of the body. Some may ſuggeſt, he has ſurely preſſed the point too far; and that his own partiality has carried him beyond the bounds of reaſon, when

when he ventures to *preſcribe* archery as a remedy againſt *old age*. However, he has not written without citing his *authorities*, (ſome of them indeed *ſtate-opinions* and ſanctioned by parliamentary declaration). On this ſubject Mr. Salzmann (the author of the *Gymnaſtic Exerciſes for Youth*) in ſpeaking of the value of archery, as an exerciſe for young perſons, ſupports his opinions by a ſenſible remark, which will apply very forcibly to this part of the author's Tracts. "I muſt confeſs," ſays he, "that every ſport, which "occupies a lad, exerciſes his faculties, and fortifies "his health, by *employing him in the open air*, "appears to me of importance. If the force of an "Ulyſſes be deſirable, let us not deſpiſe the means, by "which he acquired and exerciſed it." On many accounts archery appears to be an *exerciſe* of much value. Perhaps there is no amuſement whatever, which more awakens and enlivens the active powers, and creates ſo little ſatiety.

Part of the author's deſign was an inveſtigation of *ancient* archery, with a view to aſcertain the truth of the feats recorded of the bow in former times, when in the hands of *individuals*; and to diſentangle them, as much as poſſible, from fiction and romance: for this purpoſe, he has collected, arranged, and commented upon all ſuch feats of archery as hiſtory or tradition has handed down to us; and aſſayed the practicability of them by ſuch rules, as ſeemed beſt adapted to attain the end propoſed. Judging, that a favourable reſult to this inquiry, would quiet the many floating opinions and frequent deſultory obſervations

Digitized by Google

obſervations upon the ſubject; and would alſo afford ſatisfaction to the lovers of archery. In the courſe of this inveſtigation, many facts relative to *military* archery caught his eye; particularly ſuch as are to be found in Sir John Smith's *Diſcourſe on Weapons*: which were the ſubject of a very able publication at the cloſe of the ſixteenth century, and which are not to be met with, ſo fully detailed, in any hiſtorical writer upon the affairs of this kingdom. Hence, he was led into a new field of diſſertation on the powers of the bow, recently indeed, trod over before him by a very ingenious writer (Mr. Maſon): who (although not poſſeſſing the evidence that had fallen in the way of the author of theſe Tracts, and which was highly important to the ſubject, in as much as it greatly extended the known powers of the bow, and ſupported its military character by more recent examples of its effects, long after the introduction of *fire arms*, drawn by the pen of a man of great military ſkill and experience, who himſelf bore teſtimony to part of his narrations) offers, as far as good reaſoning and able deduction and comment can extend, a very forcible appeal in behalf of the bow, as a weapon of war; calculated to contend even with the weapons of the *preſent age*. In the courſe of this purſuit, the author was led to peruſe and conſider the arguments of thoſe, who had written in oppoſition to Sir John Smith; and to collect, from a variety of authors, whatever he could find applicable to his ſubject. This part of his work alone has proved a taſk of labour and reſearch, for having once entered upon it, he

he wiſhed to leave it complete. In accompliſhing his deſign, he has, perhaps, been ſomewhat too liberal of his notes, and at times too prolix in their details. However, in point of matter, this part of his attempt has anſwered far better than that, which purpoſes an inveſtigation into the feats of ancient archery; in purſuit of which, he was carried far into the mazes of antiquity; for, when he had extricated himſelf, he had the mortification to find, that, among the many volumes in print and manuſcript, from whence he moſt hoped for information, very little to his purpoſe could be gleaned. Yet, he feels ſome ſatisfaction in the confidence, that the ſearch has been made; and, that he ſhall obtain credit for labours, which can never be made apparent. This inquiry has, however, enabled him to introduce, in a part of the following Tracts (Part IV. Ch. vi. Sec. iii.) an account of the *length of the old Engliſh arrow*: the different opinions reſpecting which have long been a ſubject of inconcluſive argument; and, he has endeavoured, by a collection of ancient authorities in print and manuſcript, to eſtabliſh a well founded-concluſion upon this head.

The author had it in contemplation, to have introduced in the following Tracts, as accurate a ſketch of the hiſtory of our great hero of archery (Robin Hood), as the public and private libraries, to which he had acceſs, would afford. He had, indeed, entered upon the execution of this deſign; when, meeting with the *new edition* of the *Garland*, he deſiſted from further ſearches: believing, that any attempt,

Digitized by Google

attempt to add to the collections of the author of that publication upon the ſubject, would prove as fruitleſs, as any attempt to arrange and connect his own Collections, ſo as to render them in any degree as acceptable as thoſe in the *new Garland.* Indeed, to the author of that publication, both the Archer and the Antiquarian are much indebted; no leſs for the beſt and moſt authentic account of that great archer ever publiſhed; than for the valuable additions of ancient poetry relative to his exploits, which that author has made to the *Garland* itſelf. However, one Extract, upon this head, from Grafton's *Chronicle,* will be found in the courſe of the following work.

Although theſe Tracts are dedicated to the *Archer,* and the Engliſh Long-bow is the ſubject they profeſs to treat upon; yet it is a ſubject ſo intimately connected with the affairs of this kingdom, that it cannot but partially include the *Hiſtory* and *Antiquities* of Great Britain: and therefore may poſſibly attract the attention of thoſe who are fond of peruſing inveſtigations of that nature. The Engliſh long-bow has, of late years, become a topic not only of private converſation, but alſo of public diſcuſſion. In the year 1783, the Honourable Daines Barrington preſented to the Society of Antiquarians (of which he was a member) a paper upon the ſubject; which was read before them, and is printed in the *Archæologia.* It contains indeed, a very imperfect hiſtory of the Engliſh Long-bow; and, although not characteriſed by any extent of reſearch, is erroneous in many particulars. Mr.

Digitized by Google

Barrington's Miſtakes will be noticed, as they occur, in the following Tracts: which will be found to purſue the ſubject to a very remote period of time.

Beſides the lover of hiſtory and antiquities, a conſiderable part of the following work, as it involves *military affairs*, may perhaps draw the attention of *military men*: who, if they are not entirely of Sir John Smith's opinion, with reſpect to the expediency of reſuming the bow as a weapon of war to the extent he recommends, yet may deem his arguments (ſupported as they are by numerous authorities of great reſpectability and weight) ſufficiently important to merit, at leaſt, ſome *conſideration*, if not *experiment*. It is, probably, owing to this want of experiment alone, that the Engliſh long-bow has been of late years, ſo much unnoticed as a *weapon of war*. So ſimple an inſtrument carries in its appearance but little to attract attention: nor will any deſcription of its powers be fully credited: till ſupported by the actual exerciſe and diſplay of them. This obſervation is founded on daily experience. Many, who have looked upon the bow as a *toy*, have been brought to confeſs, that, upon various occaſions, it muſt prove equivalent in its effects, as a weapon of war, to modern *fire-arms*.

Whatever may be the future fate of the Engliſh long-bow; yet the memory of Engliſhmen muſt, at times, beſtow a grateful thought upon it: when they recollect, that by the aid of *this* weapon, they not only became an *independent* and *free* people; but alſo by that aid roſe ſuperior in the ſcale of European powers,

Digitized by Google

powers, and laid a ſecure foundation for their preſent commerce, trade and greatneſs. To uſe the words of Camden,—" I will ſay no more, but as one ſayth; " when Engliſhmen uſed Hercules *weapons*, the bow " and the black bill, they fought victorioufly, with " Hercules *ſucceſſe*."—(*Remaines*).

The author apprehended, that he could not ſatisfy his readers better, than by adding, to his Tracts on archery, a copy of ſo much of Wood's *Bowman's Glory* as was at all intereſting. Particularly as this little publication is now very ſcarce, ſeldom to be procured in a perfect ſtate (wanting in general the *poſtſcript*); and, being much ſought after by archers, ſells at very conſiderable price.

The *Bowman's Glory* conſiſts of two diſtinct Parts or Tracts, introduced by a ſhort addreſs to King Charles II. a dedication, and a few lines in praiſe of archery: The firſt contains

1. A Patent of King Henry VIII. (in the 29th year of his reign) appointing and incorporating the Maſter of the Ordnance and others Overſeers of the Fraternity or Guild of Saint George, and the Science of Artillery for *long-bows*, *croſs-bows* and *hand-guns*, with power to eſtabliſh the perpetual Fraternity of St. George, and with other uſual corporate powers; and licence to ſhoot at all manner of Marks and Butts, and at the game of Popinjay, and at all fowls (except in the King's foreſts, chaſes and parks without ſpecial Warrant): and to wear embroidery, ſilks, ſatins and furs, not above the furs of martens. This patent

Digitized by Google

alſo contains an indemnity to any of the fraternity, who, after having pronounced the word *faſt*, ſhall happen to hurt or kill any one paſſing between the ſhooter and his mark: ſo as the ſame was a uſual and a known mark, in an open place, accuſtomed to be ſhot at.

2. A patent of King James (in the third year of his reign) which, after noticing, that the archers marks near London, had of late been removed and obſtructed, appoints the Lord Mayor of London, the great officers of ſtate and others, to be commiſſioners, for ſurveying the grounds (near London, and within two miles) accuſtomed to have had marks for archers; and to reinſtate the marks as they were in the time of King Henry VIII.

3. A patent of King Charles (in the eighth year of his reign) for the ſame purpoſe as that of King James.

The Second Part of the *Bowman's Glory* appears to be written by W. M. or W. H. and contains an account of the public meetings or *Appearances* of archers from the year 1583. The whole of which will be found reprinted at the end of the following Tracts.

Having thus detailed the deſign of the following work, and briefly ſtated the plan of it; the author ventures to lay it before thoſe for whom it is intended: and truſts that they will overlook his errors and accept his labours in the ſervice of archery. There are many who would have performed the

Digitized by Google

the taſk in a far ſuperior manner; but the circumſtance, that (in the period of twenty years, during which time archery has produced many very excellent archers, well qualified in every reſpect to take up the ſubject) no one has ſtepped forward to afford that material aſſiſtance and ſupport to the art (by making public its benefits and rules of practice) long earneſtly deſired; and, that former reſearches upon the ſubject extend but a little way, will he truſts ſanction the preſent publication: which, although a widow's *mite*, is yet an offering at the ſhrine of archery, that may perhaps be entitled to call upon greater genius, and more perſevering and ſucceſsful labour and reſearch, for a better.

The author is well ſatisfied, that his additions to theſe collections on archery are ſcarcely worthy of notice. It is upon thoſe *Collections* alone, that he preſumes to think his Publication may become acceptable. That muſt certainly be deemed worthy attention, which is eagerly ſought after, and for the obtaining of which coſt is not ſpared. It is therefore a pleaſing circumſtance to him, that, ſetting his time and labour out of the calculation, he is enabled to lay before the admirers of archery (at barely the Printer's Charge) the following Collections upon the ſubject, from printed works, with difficulty to be procured at any price; and from manuſcripts which are only to be *ſeen*, and that in but one or two places in this kingdom.

It only remains for the author to acknowledge the friendly aſſiſtance he has received in the courſe of his undertaking.

Digitized by Google

To the pencil of an artiſt (Mr. R. K. Porter) whoſe excellent productions have long been the ſubject of great admiration and public applauſe, he is indebted for the frontiſpiece of his work; and which the reader will find referred to in the Comment upon the *Toxophilus* (Part IV. *Chap.* viii. *Sec.* iv.)

To Mr. Haworth he is indebted for the loan of the *Records* of the Finſbury Archers: and to Mr. Waring, for his communications and aſſiſtance in matters relative to the mechanical operations in archery.

As theſe Tracts are deſigned to ſupport the cauſe of archery, the following extract from *Carew* may not be miſplaced at the cloſe of this introductory Preface.

" Amongſt the bodily Paſtimes, ſhooting carrieth " the pre-eminence; to which in mine yonger yeeres " I caried ſuch affection, as I induced Archery, per- " ſwading others to the like liking, by this enſuing

PROSOPOPEIA:

" My deare Friends, I come to complaine upon you, " but to yourſelves: to blame you, but for your good: " to expoſtulate with you, but in the way of reconci- " liation. Alas, what my deſert can juſtify your " abandoning my fellowſhip, and hanging me thus " up, to be ſmoke-ſtarved over your Chimnies? I " am no Stranger unto you: but by birth, your " Country woman; by dwelling, your neighbour; by " education, your familiar: neither is my Company " ſhameful; for I haunt the light and open fields: " nor my Converſation dangerous; nay, it ſhields " you from dangers, and thoſe not the leaſt, but of " greateſt

Digitized by Google

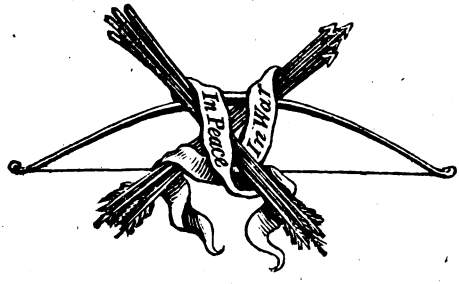
" Conſequence, the dangers of Warre. And as in
" fight I give you Protection, ſo in Peace I ſupplie
" your Paſtime; and both in Warre and Peace, to
" your lymmes I yeelde active Plyantneſſe, and to
" your bodies healthful Exerciſe: yea, I provide you
" food when you are hungrie, and helpe digeſtion
" when you are full. Whence then proceedeth this
" unkinde and unuſual ſtrangeneſſe? Am I heavy for
" burthen? Forſooth, a fewe light ſtickes of wood.
" Am I combrous for Carriage? I couch a part of
" myſelf cloſe under your girdle, and the other part
" ſerveth for a walking-ſtaff in your hand. Am I
" unhandſome in your ſight? Every Piece of mee is
" comely, and the whole keepeth an harmonical pro-
" portion. Laſtly, am I coſtly to bee provided? Or
" hard to be maintayned? No, Cheapneſs is my Pur-
" veyour, Eaſineſſe my Preſerver: Neither doe I
" make you blow away your Charges with my breath,
" or taynt your Noſe with my ſcent, nor defile your
" face and fingers with my Colour, like that hell-
" borne Murderer, whome you accept before me. I
" appeale then to your valiant Princes, *Edwards*,
" and *Henries*, to the Battayles of *Creſey*, *Poyters*,
" *Agincourt*, and *Floddon*; to the Regions of Scot-
" land, Fraunce, Spaine, Italy, Cyprus, yea and
" Jury; to be Umpires of this Controverſie: all which
" (I doubt not) will with their evidence playnely
" prove, that when mine adverſe party was yet ſcarce-
" ly borne, or lay in her ſwathling Clouts, through
" mee onely your Aunceſtours defended their Coun-
" try, vanquiſhed their enemies, ſuccoured their

 " friends,

Digitized by Google

" friends, enlarged their Dominions, advaunced their " Religion, and made their names feareful to the " preſent age, and their fame everlaſting to thoſe " that enſue. Wherefore, my dear friends, ſeeing " I have ſo ſubſtantially evicted the right of my " cauſe, conforme your wils to reaſon, conforme your " reaſon by practice, and convert your practice to " the good of yourſelves and your Country. If " I be praiſe-worthy, eſteeme mee: if neceſſary, " admit mee: if profitable, employ mee: ſo ſhall " you revoke my death to life, and ſhew yourſelves " no degenerate iſſue of ſuch honourable Progeni- " tours. And thus much for Archery, whoſe tale, " if it be diſordered, you muſt beare withall; for ſhee " is a *woman*, and her minde is paſſionate."

Survey of Cornwall.



Digitized by Google

CONTENTS.

PAGE

List of Authors quoted - - - xxxvi
List of Prints relative to Archery - - xlii

PART I.

An Examination into the Hiſtory, Character, and Military Career of the Engliſh LONG BOW, *from the Period of its Introduction into Britain to that of its Extinction as a Weapon of War: collected from the beſt Authorities: with the Opinions of well-informed Men, and ſome Obſervations, upon the Propriety of its Abolition in the Field.*

PAGE.

CHAPTER I.

SEC. 1. ANTIQUITY of the Bow—Superiority of the Bow as a Weapon of War, previous to the Knowledge of Gunpowder—Principles and Materials of Bows in General—Engliſh Nation renowned for Archery—Revolutions in the Art of War—Periods of all Arts - - 1

SEC. 2. Introduction of the Bow into Britain—Partiality of our Anceſtors for it founded upon ſolid Reaſons—Their Reluctance to abandon the Uſe of it - - 7

SEC. 3. Memory of the Bow ſtill cheriſhed in England—Advantage gained to our Enemies by the Relinquiſhment of it as a Weapon of War—Preſent State of the Bow in England—Probability of the partial Revival of Military Archery in England—Neglect of it diſapproved - - 20

CHAP. II.

EXTRACTS FROM SIR JOHN SMITH'S DISCOURSE ON WEAPONS.

SEC. 1. Reaſons for the Change in Military Weapons—Defects of the Muſket—Imperfections of the Bow—Quicker Diſcharge of the Latter—Quick Firing condemned—Superiority of Archers in the Field—Reaſons—Effects of Arrows upon the Horſe—Objections againſt the Bow anſwered - - - - - 27

SEC. 2.

Digitized by Google

PAGE.

SEC. 2. Effects of Arrows more certain than those of Bullets—Arrows terrify the Eye—Sir John Smith's Challenge to the Musket—Difference between the Range of an Arrow and a Bullet—Effects of both—Effect of Archery proved by Examples—Battles of CRESSY, POICTIERS, NAVARETTA, AGINCOURT, and HERRINGS—Opinion that Archers cannot stand the Charge of Horse answered by Examples to the contrary - - - - - 39

SEC. 3. Particular Effects of Arrows against Fire-arms, proved by Examples—KET's Rebellion—Rebellion in the West—Battle at NEWHAVEN—Superiority of English Bows and Archery, compared with the Bows and Archery of other Nations - - - - - - 54

CHAPTER III.

SEC. 1. Authorities in Support of Sir John Smith's Observations—Disuse of the Bow, as a Weapon of War, in England - - - - - - 63

SEC. 2. Comparison between the Bow and improved Fire-arms—Former Disadvantage of the Bow—Advantage of the Bullet over the Arrow—Peculiar Advantage of the Latter—Question, whether the Musket or the Bow can Discharge the fastest? considered—General Observations - 65

SEC. 3. Observations on the Possibility of increasing the Powers and Effects of the Bow—Causes of the Improvement in Fire-arms—Value and Importance of lately imported Bow-woods—Improvement in the Construction of the Bow - - - - - - 72

PART II.

An Account of the Revival of Archery, as an Amusement, in England: in which the Value of it as an Exercise capable not only of affording much Pleasure and Satisfaction, but also of restoring Health, and adding Vigour to the Nerves and Strength to the Body, is considered.

CHAPTER I.

SEC. 1. Archery always an Amusement in England—Till of late confined chiefly to the North—Revival of Archery in the South—Cause—Value of the Art as an Exercise—Authorities—Archery particularly recommended to young Persons—Not denied to old Age—Effect of Archery in relieving the Mind - - - - - 77

SEC. 2.

Digitized by Google

PAGE.

SEC. 2. Archery uſed as an Exerciſe by the Firſt Perſonages in all Nations—Faſhionable in England in the Times of Henry VIII. and his Succeſſors, till the Revolution—Cauſes of its former Decline—Modern Archery patronized by the Prince of Wales and the Nobility—In the Hands of the Fair Sex—Defence of it in their Hands—Value of Archery in promoting liberal and friendly Society—Peculiarity of its Tendency in this Reſpect—Unreſtrained Pleaſures of the Amuſement - - - - - 85

PART III.

An Inquiry and Inveſtigation into ſuch extraordinary Feats, as are ſaid to have been achieved with the Engliſh Long-bow, in former Times; and particularly by that great Hero of Archery, ROBIN HOOD: *with an Account of that famous Outlaw, from the moſt authentic Record: and a Compariſon of thoſe Feats of Archery, with ſuch as are well atteſted in modern Times.*

CHAPTER I.

SEC. 1. Preliminary Obſervations—Truth of the Exiſtence and Hiſtory of *Robin Hood* - - - 93

SEC. 2. Teſtimonies reſpecting Robin Hood's Feats of DISTANT Archery—Obſervations—Shots from Turkiſh Bows—Shot from a Bow drawn with both Hands—Diſtant Shots by modern Archers—Obſervations on Robin Hood's Archery - - - - - - 96

SEC. 3. Obſervations on the probable Extent of Robin Hood's Shots, drawn from the Power of the Bow ſuppoſed to have been uſed by him—Concluſion - - 104

SEC. 4. Robin Hood's Feats of SKILL—Obſervations—Feats of Skill recorded of other Archers—Feats of Skill in Archery in modern Times - - - - - 108

PART IV.

The Art and Practice of Archery, including a Comment upon the TOXOPHILUS *of* ASCHAM.

CHAPTER I.

OF THE INSTRUMENTS OF ARCHERY. 117

CHAP-

Digitized by Google

PAGE.

CHAPTER II.

Of the Bracer.

Uſe of the Bracer—Form and Materials of the ancient Bracer—Modern Bracers - - - - 118

CHAPTER III.

Of the Shooting-Glove.

Uſe of the Shooting-glove—Ancient Shooting-glove—Modern Shooting-gloves—Materials—Fingers uſed in drawing the String—Handle of the Bow formerly waxed—Now covered with Velvet, Shag, or Worſted Lace - - - 121

CHAPTER IV.

Of the String.

Importance of good Strings—Whether the String ſhould be made of Hemp or Silk—Strings how made—Different Effects of thick and thin Strings—Of whipping Strings, and preventing them from ſoon wearing out - - 125

CHAPTER V.

Of the Bow.

Sec. 1. Woods proper for Bows—Value of Yew as a Bow-wood—Superior Value of Foreign Yew—New Conſtruction of the Bow—Origin of the Invention—Newly imported Bow-woods—Metal Bows - - - - 129

Sec. 2. Choice of the Bow.

Rules—Defects to be avoided—Parts of Trees uſed in Bow-making—Obſervations - - - - 137

Sec. 3. Of Proving the Bow.

How a good Bow may be known and proved—How it is to be altered—Reaſons and Obſervations - - 140

Sec. 4. Of the Handle.

Poſition of the Handle—Difference in Opinion on this Head—Obſervations - - - 142

Sec. 5. Of the Horns.

Roundneſs to be obſerved in forming the Nock of the Horns—Method of placing the Nocks of the Horns formerly uſed in Scotland—Ornaments for the Upper Horn - - - - - 143

Sec. 6.

Digitized by Google

PAGE.

SEC. 6. LENGTH OF THE BOW.

Mr. Barrington's Obſervations reſpecting the Standard Length of the Bow conſidered—His Errors on this Head pointed out—Statute of 5 Ed. IV. cited—Remarks on that Statute—Obſervations on the proper Length of the Bow - - - - - 144

CHAPTER VI.

OF ARROWS.

SEC. 1. Different Parts of a Shaft—Woods proper for Steles—Rules to be obſerved in making Steles—Woods proper for War Arrows—Woods uſed for Steles in modern Archery—Their different Qualities - - - 147

SEC. 2. OF WEIGHING AND PAIRING ARROWS.

Arrows weighed and paired in former Times—Now weighed by Troy Weight—Advantages of this Method—Scale of Weights for Arrows uſed in different Kinds of Shooting—Conſequence of Shooting with Arrows of unequal Weights - - - - - 152

SEC. 3. LENGTH OF THE ARROW.

Length of the Arrow not noticed by Aſcham—Opinion reſpecting the Length of the Arrow compared with that of the Bow—Length of Flemiſh Arrows—Reaſons—Length of Arrows uſed in diſtant Shooting - - 154

SEC. 4. FORMS OF ARROWS.

Different Forms of Steles ſuited to different Shooters—Reaſons and Obſervations—Principles of Arts drawn from Obſervations upon the Wiſdom of Providence, in the Formation of Animals - - - 158

SEC. 5. OF PIECING SHAFTS.

Reaſons—Origin—Utility - - - - 160

SEC. 6. OF THE NOCK.

Nocks of Arrows differently made—Advantages of different Nocks conſidered—Obſervations on the Double Nock - - - - - 161

SEC. 7.

Digitized by Google

PAGE.

SEC. 7. OF THE FEATHER.

Importance of the Feather—Obſervations on the Feathers of different Birds—Their different Properties in Archery—Value and Uſe of the Gooſe-Feather in former Days—Merits of the Turkey-Feather—Obſervations on the Feathers of the Gooſe—Difference of Feathers in the ſame Wing—Reaſons for paying Attention to the Colour of the Feather—Feathers the moſt eſteemed when dropped - 163

SEC. 8. OF SETTING ON THE FEATHER.

Feathers ſhould be drawn with Care—Cautions and Reaſons—Obſervations and Rules for uſing long and ſhort Feathers—Opinion reſpecting the Inclination or Incurvation obſerved in ſetting on the Feather—How far adopted by other Nations—Circularity the PRIMUM MOBILE in Archery - 168

SEC. 9. OF TRIMMING THE FEATHER.

Rules to be obſerved in trimming the Feather—Plucking of Feathers—Flight-Arrows, how feathered - - 170

SEC. 10. OF THE HEAD.

Origin and Uſe of the Head—Different Kinds of Heads for pricking—Obſervations on the Uſe and Effect of each—Materials of Heads—Compariſon between the Different Effects of ſharp and blunt Heads, ſupported by Experiment - - - - - 171

SEC. 11. OF SETTING ON THE HEAD.

Rules for ſetting on the Head—Reaſons why the ſhort Head is better than the long Head - - - 175

CHAPTER VII.

OF THE BELT, TASSEL AND GREASE-POT.

Their different Uſes - - - - 176

CHAPTER VIII.

OF SHOOTING IN GENERAL.

SEC. 1. General Obſervations—Faults obſerved in Archers—*Aſcham's* five Points of Archery - - 177

SEC. 2. OF STRINGING THE BOW.

Cautions—Different Effects of the high and low Bend—Rule for aſcertaining the proper Bend—Of Stringing a Bow that is caſt—Poſition of the String to be attended to - 182

SEC. 3.

Digitized by Google

PAGE.

SEC. 3. OF BRACING AND UNBRACING THE BOW.

Ancient and modern Methods - - - 184

SEC. 4. OF STANDING.

Rules to be obſerved in aſcertaining the proper Poſition and Attitude of an Archer—Authorities—Remarks and Inſtructions—Reference to the Frontiſpiece—Characteriſtics of Archery—The Archer's Attitude a Subject of Admiration 186

SEC. 5. OF NOCKING.

Nocking the eaſieſt Part of Archery—Cautions—Method of preventing irregular Nocking—Of handling the Bow - 191

SEC. 6. OF DRAWING.

Drawing the beſt Part of Shooting—Rules and Remarks - 193

SEC. 7. OF HOLDING.

How Holding is to be performed—Poſition in which the Bow ſhould be held - - - - 195

SEC. 8. OF LOOSING.

Rules to be obſerved in Looſing - - - 196

SEC. 9. OF SHOOTING AT MARKS.

Firſt Leſſons - - - - 198

SEC. 10. OF ELEVATION.

Obſervations on Elevation—Higheſt Point of Elevation—Different Methods made Uſe of by Archers to obtain due Elevation—Remarks - - - - 199

SEC. 11. OF THE WIND AND THE WEATHER.

Neceſſity for an Archer to underſtand and ſtudy the Nature of the Wind, and to become well acquainted with the Flight of his Arrows—Difference of the Seaſons—Effect of the Weather upon the Bow and the Archer—Effects of the Wind in Archery—Courſe and Nature of the Winds—Cautions to be obſerved in Shooting near the Sea Coaſts and Rivers affected by a Tide - - - 202

SEC. 12. OF THE FOOTING.

Footing or Standing in the Wind, the beſt Means of counteracting its Effects - - - - 208

SEC. 13. OF TAKING AIM.

Obſervations - - - - - 209

SEC. 14. OF KEEPING A LENGTH.

Cautions and Remarks - - - - - 210

SEC. 15.

Digitized by Google

PAGE.

SEC. 15. OF SHOOTING STRAIGHT.

Obſervations—Different Means to ſhoot ſtraight, uſed by different Archers—Different Ways of looking at the Mark—Nature and Powers of the Eye—Cauſes of not ſhooting ſtraight—Remedy—Neceſſity of keeping the Eye always fixed on the Mark - - - - - 211

CHAPTER IX.

GENERAL OBSERVATIONS AND CAUTIONS.

SEC. 1. Means of attaining to Excellence in Shooting—An Art in Archery to be found out and commanded - 216

SEC. 2. Of uſing Strong Bows—General Rules for chuſing the Power of Bows - - - - 217

SEC. 3. AFFECTIONS OF THE MIND - - 220

SEC. 4. OF BREAKING BOWS.

Means by which Bows are broken—By the String—By the Shaft—By drawing too far—Remedy and Tokens of theſe Cauſes—By Frets—Obſervations on the Remedy for Frets—By Shooting in Winter - - - - 221

SEC. 5. OF PRESERVING BOWS.

Of poliſhing Bows—Bow Caſes—Of oiling Bows - 226

SEC. 6. OF UNBENDING AND CHANGING BOWS DURING SHOOTING - - - - - 227

SEC. 7. ASCHAM'S CONCLUSION - - - 228

CHAPTER X.

OF THE SEVERAL KINDS OF SHOOTING, AND THE RULES TO BE OBSERVED THEREIN.

SEC. 1. Roving - - - - 230

SEC. 2. Hoyle Shooting - - - - 236

SEC. 3. Flight-Shooting - - - - 237

SEC. 4. Butt Shooting - - - - - 238

SEC. 5. Prick Shooting - - - - 241

SEC. 6. Clout Shooting - - - 245

SEC. 7. Shooting for Prizes - - - - 246

SEC. 8. Of the Popinjay and Gooſe - - - 248

SEC. 9. Of Pluck Buffet - - - - 249

SEC. 10. Of Fiſh Shooting - - - - Ib.

A Remem-

Digitized by Google

A Remembrance of the Shows and Shootings, or Appearances of Archers, in the Sixteenth and Seventeenth Centuries.

PAGE.

Addreſs - - - - - - 255

The Shooting of the Duke of Shoreditch, (Anno 1583) - 257

The Show at St. Martin's in the Fields, in ſetting up the Queen's Stake - - - - - - 277

A Relation of the ſeveral Appearances of Archers ſince the Reſtoration - - - - 279

Poſtſcript - - - - - -

A Gloſſary, or Explanation of the Terms made uſe of in Archery - - - - - 285

Additions - - - - 297

Errors - - - - 299

Digitized by Google

LIST

OF THE

PRINCIPAL WORKS

QUOTED OR REFERRED TO.

TO prevent the frequent Repetition of the numerous Authorities quoted and referred to in theſe Tracts, with their Titles and Editions, and to facilitate the Reader's Reference to the Originals; the following Liſt of Printed and Manuſcript Works is laid before him.

AFFAIRS from Public Records, MSS. *Bibl. Cott.*

Aleyn (*Charles*). The Battailes of Creſcey and Poictiers. *London*, 1633, 12mo.

Anglica, Hibernica, Normannica, Cambrica, à Veteribus Scripta. Ex quibus Giraldus Cambrenſis, &c. *Francofurti. Anno*, M. D. C. II. fol.

Archæologia, or Miſcellaneous Tracts relating to Antiquity, publiſhed by the Society of Antiquarians of London. *London*, 1770, 4to.

Archerie.—A Brief Treatiſe to prove the Neceſſity and Excellence of, (by *R. S.*) *Lond.* 1596, 4to.

Arnott (*Hugo*).—Hiſtory of Edinburgh. *Edinb.* 1779, 4to.

Art of War, MSS. *Bibl. Harl.*

Aſcham (*Roger*).—Toxophilus, or the Schole of Partitions. *Lond.* 1544, 4to.

Ayme for the Finſbury Archers, or an Alphabetical Table of the Names of every Mark within the ſame Fields, with the true Diſtances

Digitized by Google

Diſtances by the Map, and Dimenſuration with the Line, publiſhed by J. S. and E. B. *Lond.* 1594, 16mo. Republiſhed by R. F. 1604, and again by James Partridge, 1628.

Barclay (*Joh.*).—Euphormionis Satyrici Icon Animorum, 1615, 12mo.

Barnes (*Joſhua*) Hiſtory of Edward III. and the Black Prince. *Camb.* 1688, fol.

Barrington (Hon. *Daines*).—Obſervations on Archery. *See* Archæologia, or Miſcellaneous Tracts relating to Antiquity, publiſhed by the Society of Antiquarians of London, (vol. 7). *Lond.* 1740, 4to.

Barwick (*Humphrey*).—A breefe Diſcourſe, concerning the Force and Effect of all Manual Weapons of Fire, and the Diſability of the Long-Bow, or Archery. *Lond.* 4to.

Bellay (*Guil. de*).—De la Diſcipline Militaire. *Lyon.* 1627, 12mo.

Boſwell (*James*).—Tour to the Hebrides. *Lond.* 1785, 8vo.

Camden (*William*).—Remaines concerning Britaine. *Lond.* 1614, 4to.

Cantemir (*Demetrius*).—Hiſtory of the Growth and Decay of the Othman Empire, Engliſhed by N. Tindal. *Lond.* 1734, fol.

Carew (*Richard*).—Survey of Cornwall. *Lond.* 1602, 4to.

Charlton.—Hiſtory of Whitby Abbey. 4to.

Chardin (*Le Chevalier*).—Voyages en Perſe et autres Lieux de l'Orient, 3 tom. *Amſt.* 1711, 4to.

Cluveri (*Phil.*).—Germaniæ Antiquæ. *Lugd. Bat.* apud Elzev. 1616, fol.

Comines (*Phil. de*).—Memoires, 3 tom. *Bruſſ.* 1706, 8vo.

Collections about levying of Men for the Service of War, taken out of the Records, MSS. *Bib. Cott.*

Country Contentments, (by *G. M.*). *Lond.* 1615 and 1649, 4to.

Daniel (*Samuel*).—Collection of the Hiſtory of England. *Lond.* 1650, fol.

Daniel (*Pere*).—Hiſtoire de France, 7 tom. ſecond edit. *Amſt.* 1720, 4to.

———— Hiſtoire de la Milice Françoiſe, 2 tom. *Amſt.* 1724, 4to.

Digitized by Google

Deſaguliers (*J. T.*).—Syſtem of Experimental Philoſophy, proved by Mechanics. *Lond.* 1734, 4to.

Ducarell (*Andrew Coltée*)—Anglo-Norman Antiquities. *London*, 1767, fol.

Edmonds (*Clement*).—Commentaries of C. Julius Cæſar, tranſlated into Engliſh, with Obſervations, Comments and Notes. *Lond.* 1695, fol.

Edward VI.—MS. Diary in his own Hand. *Bibl. Coit.*

Fire-Shafts.—A new Invention of Shooting Fire-Shafts in Long-Bows (by a true Patriot). *Lond.* 1628, 4to.

Fitzſtephen (*Will.*)—Deſcription of London, with a Commentary. *Lond.* 1772, 4to.

Forteſcue (Sir *John*).—Difference between abſolute and limited Monarchy. *Lond.* 1714, 8vo.

Froiſſart (*Joh.*)—Chroniques de France et d'Angleterre, 4 vol. *Par.* 1518, 4to. *See* the old Engliſh Tranſlation.

Fuller (*Thomas*).—The Hiſtory of the Worthies of England. *Lond.* 1662, fol.

Garland. *See* Robin Hood.

Gibbon (*Edw.*)—Hiſtory of the Decline and Fall of the Roman Empire, 6 vol. 3d edit. *Lond.* 1778, 4to.

Goodwin (*Thomas*).—Hiſtory of the Reign of King Henry V. *Lond.* 1704, fol.

Grafton (*Richard*).—Chronicle of Briteyn. *Lond.* 1568, fol.

Greaves (*John*).—Deſcription of the Pyramids in Egypt. *Lond.* 1646, 8vo.

Hanmer (*Meredith*).—Hiſtory and Chronicle of Ireland. *Dubl.* 1633, fol.

Hargrove (*E.*)—Anecdotes of Archery. *York*, 1792, 12mo.

Hayward (Sir *John*).—The Lives of the three Norman kings of England. *Lond.* 1613, 4to.

———————— Life and Raign of King Edward VI. *Lond.* 1630, 4to.

Herbert (*Edward*).—Baron de Cherbury. Life and Reign of King Henry VIII. *Lond.* 1672, fol.

Herbert (*Thomas*).—Deſcription of the Perſian Monarchy. *Lond.* 1634, fol.

Herbert

Digitized by Google

Herbert (*Thomas*).—Travels into Africa and Asia. *Lond.* 1677, fol.
Hollinshed (*Raphael*).—Chronicles of England, Scotland, and Ireland, 2 vols. printed by John Harrison. *Lond.* 4to.
Jovius (*Paulus*).—Descriptio Britanniæ, Scotiæ, Hiberniæ, et Orchadum. *Ven.* 1548, 4to.
Knowles (*Richard*).—General History of the Turks. *Lond.* 1638, fol.
Latimer (*Hugh*).—Sermons. *Lond.* 1635, 4to.
Leland (*Joh.*)—De Rebus Britannicis Collectanea, Edit. Thomas Hearne, 6 tom. *Oxon.* 1715, 8vo.
Leonis (*Imp.*)—Tactica sive de Re Militari. *Lugd. Bat.* 1612, 4to.
Lyttelton (*Geo.* Lord).—The History of the Life of King Henry II. and of the Age in which he lived, 4 vol. *Lond.* 1767, 4to.
Markham (*Gervase*).—Art of Archerie. *Lond.* 1634, 12mo.
———— Country Contentments. *Lond.* 1615, 1649. 4to.
Mascou (*Joh. Jacob*).—The History of the ancient Germans, and other Northern Nations, translated by Thomas Lediard, 2 vol. *Lond.* 1738, 4to.
Mason (*Richard Oswald*).—Considerations on the Use of the Long-Bow and Pike. *Lond.* 1798, 8vo.
Montluc (*Blaise de*).—Commentaires, 2 tom. *Bourd.* 1592, 8vo.
Montfaucon (*Bern. de.*).—Monumens de la Monarchie Françoise, 5 tom. *Par.* 1729, fol.
Moseley (*Walter Michael*).—Essay on Archery. *Worcest.* 1792, 8vo.
Mulcaster (*Richard*).—Positions concerning the training up of Children. *Lond.* 1581, 4to.
Muratori (*Lud. Ant.*)—Antiquitates Italiæ medii Ævi. 6 tom. *Mediol.* 1738, fol.
Neade (*Will.*)—Double-armed Man. *Lond.* 1625, 4to.
Norfolk Militia.—Plan of Discipline for the Use of the. *Lond.* 1760, 4to.
Oldfield (*H. G.*)—Anecdotes of Archery. *Lond.* 1791, 12mo.
Patrizi (*Franc.*)—Paralleli Militari. *Rom.* 1594, fol.
Peck (*Francis*).—Desiderata Curiosa. *Lond.* 1779, 4to.
———— The Antiquarian Annals of Stanford. *Lond.* 1727, fol.

Percy

Digitized by Google

Percy (*Thomas*).—Reliques of ancient Engliſh Poetry, 3 vol. *Lond.* 1765, 8vo.

Pinkerton (*John*).—Hiſtory of the Scots from the Acceſſion of the Houſe of Stuart to that of Mary, 2 vols. *Lond.* 1797, 4to.

Plinii (*Caii Secundi*).—Hiſtoriæ Naturalis, 2 tom. *Par.* 1723, fol.

Robertſon (*William*)—Hiſtory of America, 2 vol. *Lond.* 4to.

Robins.—New Principles of Gunnery. *Lond.* 1742.

Robin Hood.—A Collection of all the ancient Poems, &c. now extant with hiſtorical Anecdotes of his Life, 2 vol. *Lond.* 1795, 8vo.

Rollin.—Ancient Hiſtory (Engliſh), 10 vols. *Lond.* 1754.

Roſs (*John*).—Hiſtoria Regum Angliæ. Edit. Tho. Hearne. *Oxon.* 1716, 8vo.

Salzmann (*C. G.*)—Gymnaſtics for Youth, (tranſlated from the German). *Lond.* 1800, 8vo.

Sandys (*George*).—Relation of a Journey to the Mediterranean and other parts. *Lond.* 1670, fol.

Saville (*Henry*).—Rerum Anglicarum Scriptores, poſt Bedam. *Lond.* 1596, fol.

Scheffer (*Johan.*)—Lapponica. *Franc.* 1673, 4to. Angl. *Oxon.* 1674, fol.

Scot (*Reginald*).—Diſcovery of Witchcraft. *Lond.* 1665, fol.

Shotterell (*Robert*) and *Durfey* (*Thomas*).—Archerie Revived, or the Bowman's Excellence; an Heroic Poem. *Lond.* 1676, 8vo.

Smith (Sir *John*).—Certain Diſcourſes on Weapons. Compariſon of Weapons. *Lond.* 1590, 4to.

———— Anſwer to Mr. Barwick, MS. *Bibl. Harl.* No. 135.

Speed (*John*).—Hiſtory of Great Britaine. *Lond.* 1650, fol.

Spelman (Sir *John*).—Life of Alfred the Great, by Thomas Hearne, *Oxon.* 1709, 8vo.

Stow (*John*).—Survey of London, 1598, 4to.—Enlarged by John Strype, 2 vol. *Lond.* 1720. fol.

———— Annales, or a General Chronicle of England. *Lond.* 1631, fol.

Strutt (*Joſeph*).—Horda Angel-cynnan, or a compleat View of the Manners, &c. of the Inhabitants of England, from the Arrival of the Saxons, till the Reign of Henry VIII. 3 vol. *Lond.* 1775, 4to.

Stuart

Digitized by Google

Stuart (*James*).—Antiquities of Athens, 3 vol. *Lond.* 1762, fol.

Survey of Engliſh Forts, &c. MSS. *Bibl. Harl.*

Taverniere (*Jean Baptiſte*).—Voyages en Turquie, en Perſe, & aux Indes, 3 tom. *Par.* 1676-9, 4to.

The Booke of certain Triumphes upon the Marriage of Richard Duke of York (Son to King Edward IV.) with Ann Mowbray, Daughter to the Duke of Norfolk, MSS. *Bib. Harl.*

Turner (*Samuel*).—Account of an Embaſſy to the Court of the Teſhoo Lama, in Tibet: and Narrative of a Journey through Bootan. *Lond.* 1800, 4to.

Vegetius (*Flavius*).—De Re Militari, cum Commentariis, aut Notis Franc. Modii, &c. &c. *Raphel.* 1607, 4to.

Walker (*Joſeph C.*)—An Hiſtorical Eſſay on the Dreſs of the Ancient and Modern Iriſh; to which is ſubjoined a Memoir on the Armour and Weapons of the Iriſh. *Dubl.* 1788, 4to.

Warrington (*William*).—Hiſtory of Wales, 2 vol. *Lond.* 1791, 8vo.

Williams (Sir *Roger*).—A Brieſe Diſcourſe of Warre. *Lond.* 1590, 4to.

Wood (*Ant.*)—Athenæ Oxonienſes. *Lond.* 1721, fol.

Mr. Barrington, at the End of his Obſervations on Archery, notices a MS. Treatiſe on Archery, by a Sadler of Mancheſter; ſaid to be in the poſſeſſion of Sir Aſhton Lever. This Treatiſe, upon Inquiry, cannot now be found; but by thoſe who have ſeen it, is ſaid to be of no Value; containing only ſome few Extracts from Aſcham, with ſome very trifling Obſervations, accompanied with Drawings of the Forms of common arrows.

N. B. The following Book is not quoted or referred to; but may be ſaid to *relate* to Archery.

Poems on the Archers of the Royal Company of Archers, by ſeveral Hands. *Edinb.* 1726, 8vo.

IT may not be unacceptable to the Admirers of Archery, to be informed, that the following Prints have lately been publiſhed on the Subject.

An

Digitized by Google

An Ancient Archer in Mail.—Deſigned by Stodart and engraved by Heath.

This Figure is the Frontiſpiece to Mr. Moſeley's Eſſay on Archery. It is very neatly engraved, but an incorrect Example of the Archer's Poſition, Attitude and Action. For he is repreſented drawing his Arrow at a Mark: and if a *diſtant* one is deſigned, his *Bow-hand* is too low: if a *near* one, *his drawing-hand* very much ſo; and the Elbow of his drawing-arm is too much raiſed. He is drawn with the *heel* of his right foot elevated, in the act of Shooting, a very great Error of the Deſigner. In other reſpects, the Action of the Archer is faultily deſcribed.

The above Criticiſm upon this Figure appears the more neceſſary to be noticed, as it has lately been reduced by Harper, and prefixed to the *Wrexham* Edition of Aſcham; which may fall into the Hands of thoſe, who may be induced to rely upon this attitude as an Example to be followed.

An Engraving of a *Portrait of Sir William Wood*, in his dreſs as Marſhal of the Finſbury Archers, from an original Picture in the poſſeſſion of the Toxophilite Society. Drawn by *S. Harding.* Engraved by *J. Clamp.* Publiſhed May 21, 1793.

Archery.—A Print repreſenting the Shooting at Blackheath. Deſigned by Joſeph Slater. Engraved by J. Heath. Publiſhed March 23, 1789.

Meeting of the Society of Royal Britiſh Bowmen in Gwerſyllt Park, Denbighſhire, in Aqua-tinta. The Figures drawn by R. Smirke, R. A. The Landſcape by J. Emes. The Aqua-tinta by G. Apoſtool. Publiſhed April 1, 1794.

Female Archers.—Three Figures deſigned by Adam Buck. Engraved by Wright and Ziegler. Publiſhed 1799.

The Frontiſpiece to Markham's Art of Archery, is the Figure of King Charles I. deſigned as an Archer; but very indifferently executed.

Bromley (in his *Catalogue of Engraved Britiſh Portraits)* notices a whole Length of *Aſcham* reading to the Queen, prefixed to his Epiſtles, by *Elſtob*, 8vo. but it ſeems doubtful whether this is a *real* Portrait.

Digitized by Google

PART I.

AN EXAMINATION INTO THE HISTORY, CHARACTER AND MILITARY CAREER OF THE ENGLISH LONG-BOW, FROM THE PERIOD OF ITS INTRODUCTION INTO BRITAIN TO THAT OF ITS EXTINCTION, AS A WEAPON OF WAR: COLLECTED FROM THE BEST AUTHORITIES: WITH THE OPINIONS OF WELL INFORMED MEN, AND SOME OBSERVATIONS, UPON THE PROPRIETY OF ITS ABOLITION IN THE FIELD.

Digitized by Google

Digitized by Google

TRACTS, &c.

CHAPTER I.

SECTION I.

Antiquity of the Bow—Superiority of the Bow as a Weapon of War, previous to the Knowledge of Gunpowder—Principles and Materials of Bows in general—Engliſh Nation renowned for Archery—Revolutions in the Art of War—Periods of all Arts.

OF all the inventions of men, ſcarcely any one can challenge higher antiquity, (1) or more univerſal and long continued uſe, than the *bow*; a weapon which

(1) Of the origin and firſt invention of the bow, we have neither hiſtory nor tradition. Mr. Moſeley (who has carried his obſervations upon the ſubject to a very diſtant age) leaves unſolved the queſtion, by what accident the ſtring was firſt applied to the wood, and the arrow to the ſtring. He notices (with Aſcham) the opinions of the ancients: ſome of whom aſcribed the invention to Apollo, others to Perſes the ſon of Perſeus, and Scythes, the ſon of Jupiter; and after obſerving, "that the "founder of every nation has the merit of the diſcovery of the "bow aſcribed to him by the inhabitants;" he concludes, "that "it is in vain to make conjectures on the ſubject; the early pe"riods of the world being hidden in ſuch denſe obſcurity, that "we cannot form any plauſible hypotheſis, to ſerve as an expla"nation." *Moſeley*, p. 43. However we find mention of the bow in the moſt ancient and moſt authentic hiſtory of the firſt ages of the world, and for the firſt time, in the days of Iſaac, (about the year 1760 before Chriſt.) *Geneſis*, c. xxvii. v. 3. Aſcham obſerves,

 that

Digitized by Google

which has been common to almoſt all (2) people, and a chief inſtrument of victory and conqueſt from the remoteſt period of time. Previous to the diſcovery of gunpowder, the bow was, unqueſtionably, the moſt *efficacious* (3) weapon of war; it united and concentrated the diſtinct powers of the only two weapons of diſtant offence, that had been diſcovered and made uſe of, namely the *dart*, *javelin*, or *lance*; and the *ſling*. To the *certainty* of the former, it added the *velocity* of the latter. For it muſt be apparent to every one who conſiders the conſtruction and effect of this weapon (the bow) that the arrow is but the *lance*, reduced in quantity of *matter*, and increaſed in quantity of *motion*; by the power of an inſtrument, capable of communicating a velocity far greater than that given by the arm, and of

that Nicholas de Lyra carries the antiquity of the bow, as far back as the days of *Adam*, ſuppoſing, that it was the weapon with which Lamech ſlew Cain. *Toxophilus.*

(2) Dr. Robertſon, (in his Hiſtory of *America*,) informs us, "that there were ſome tribes on that continent, who were ſo deſtitute of art and ingenuity, that they had not attained to the "diſcovery of this ſimple invention." Vol. I. B. iv. p. 375, (4to. edit. 1777.) Our late diſcoveries have traced it to the moſt remote parts of the globe. *Cook's Voyages.*

(3) Mr. Barrington obſerves, "that the Engliſh were ſo well "trained to the uſe of the bow, that their armies had (it ſhould "ſeem) the ſame advantage over their enemies, as the excluſive "uſe of fire-arms would give us at preſent." It was not only owing to the excellence, but alſo to the *number* of the archers, that the Engliſh obtained ſo many victories; for we find, that the ſtrength and *main body* of their armies, frequently conſiſted of *archers*, while their enemies in early time, in general compoſed their armies chiefly of *men at arms*, on whom they placed the greateſt dependence. Upon which circumſtance Philip de Comines makes the following obſervation. "Mon advis eſt que la ſouveraine choſe du monde pour les battailes, ſont des *archiers*: mais "qu'ils ſoient *à milliers (car en petit nombre ne valent rien.")* *Memoires*, tom. i. p. 25.

continuing

Digitized by Google

continuing it to an infinitely greater diſtance, than the latter can by any means be made to attain (4).

Lamentable is the truth, that owing to the corrupt ſtate and violent paſſions of mankind, war always has been, and ſtill is, the chief art cultivated among even the moſt civilized people. (5) Among the ſtill barbarous nations indeed, it is almoſt the only one cultivated at all. We therefore cannot wonder, that an inſtrument, which in its effects was found to be not only materially uſeful, in the conſtant war which man wages againſt the beaſts of the field, but alſo to poſſeſs very extenſive powers in the frequent conteſts between man and man; ſhould afterwards be turned to the deſtruction of the human race. Its firſt uſe procured for it univerſal reception and confidence; its latter deſtination aſſigned it, until long after the introduction of gunpowder, the chief place among the implements of war.

The *principles* upon which bows were conſtructed, (although different nations made uſe of different materials,) have been very ſimilar in all countries. The only materials hitherto employed, have been *horn* and *wood*;(6) the former are peculiar to moſt of the Eaſtern,

(4) The ancients (both Greeks and Romans) appear to have made uſe of a thong in projecting their darts or javelins. The natives of ſome of the South Sea Iſlands, uſe a grooved piece of wood with a ſtop at the end, called a *throwing ſtick*; with the help of which, they are ſaid to caſt a ſpear *fifty* yards with *unerring* certainty. In the Iſland of Tanna the natives throw their darts (by means of a cord) *ſeventy* and *eighty yards*. *Cook's Voyages.*

(5) The great hiſtorian and philoſopher *Gibbon*, makes the following obſervation upon the diſcovery of gunpowder. "If," ſays he, "we contraſt the rapid progreſs of this miſchievous diſ-"covery, with the ſlow and laborious advances of reaſon, ſcience, "and the arts of peace; a philoſopher, according to his temper, "will *laugh* or *weep* at the follies of mankind." Vol. vi. p. 377.

(6) As to bows of *metal*, ſee *poſt (part 4. ch. 5. ſec. 1.) Croſs-bows* although originally made of *wood*, and afterwards of *horn*, have, for many ages, been made of *ſteel*. A very full account of the croſs-bow may be found in *Muratori Antiq. Ital. tom. 2. Diſſert. 26.* and *Daniel Hiſt. de la Milice Francoiſe, tom. 1.*

Digitized by Google

as the latter are to moſt of the European and other Nations. The Chineſe-Tartary bow conſiſts (except in the center and at the extremes) entirely of horn. The Perſian and Turkiſh bows have generally a ſpecies of elaſtic wood *incorporated* (as it were) with the horn, along both curves of the bow. Mr. Moſeley has deſcribed the ſhape and materials of the bows uſed in all parts of the world. But he is ſomewhat incorrect in his deſcription of the Perſian bow; obſerving that the horn is united to the wood by means of *catgut*. For the horn uſed in the conſtruction not only of the *Perſian* bows, but alſo of ſuch *Turkiſh* bows as are not made with the *natural* horn, undergoes a preparation before it is uſed in bow-making; being completely fuſed or liquefied, and in that ſtate is (by means of its *own tenacity or a glue*) incorporated with the wood. Theſe bows, after they are made, are often (in different places) bound tight with cane or the ſinews of the Buffalo, in order to increaſe their ſtrength and prevent their giving way (7).

Of

(7) In ſome countries, the bow has made far greater advances to perfection, than in others. But where we find it rude and ſimple in ſhape, and clumſy in operation; we ſometimes ſee it aſſume a moſt terrific and abhorred appearance; becoming the conductor of certain and inevitable death, by the ſlighteſt wound from the arrow it projects, when dipt in the juice of ſome poiſonous vegetable. Mr. Moſeley has given an account of numerous experiments made upon animals, with the poiſon uſed for infecting arrows; which in general proved immediately fatal, and he quotes from *Tavernier's Travels*, a very remarkable occurrence in proof of the inſtantaneous effect of the poiſon uſed by the inhabitants of Makaſſar; in which an arrow having been dipped, it was blown through a tube with ſuch dexterity, as to ſtrike the great toe of a condemned perſon, (the criminal having deſired to be wounded in that part of his body,) and although two European ſurgeons on the ſpot, immediately exerted their ſkill, and amputated the part *far below* the wound, with quick diſpatch; the man died in their hands. *Moſeley*, p. 150. Mr. Paterſon (in his Travels in Africa, in the years 1777-8-9,) tells us, " that he fell in with an European " woman, who had been wounded with a poiſoned arrow. Great " pains

Of all nations, who adopted the uſe of the bow, no one was ever found, to be ſo fully competent to the exerciſe and command of its greateſt powers, as the *Engliſh*, who with this weapon, acquired the moſt memorable renown, and gained ſuch victories, as aſtoniſhed Europe.

In the following pages, we ſhall find, (upon the report of Sir John Smith,) in what high eſtimation the Engliſh archers were held by other nations; and the praiſes beſtowed (even by our enemies) upon their achievements with the long bow; a little while before it gave place to a newly-invented weapon. In very early times, the ſkill and valour of the Engliſh archers, carried their fame into foreign countries. Pére Daniel, ſpeaking of the archers of Henry V. calls them "*milice redoubtable, & qui n'avoit point d'égale, en ſon eſpéce, dans les autres nations.*" *Hiſt. de France, tom.* 3. p. 873. and Philip de Comines ſtiles them "*la fleur des archiers du monde.*" *Memoirs, tom.* i. ch. 3. p. 21. The Duke of Guelderland in a letter to King Richard II. makes uſe of this very remarkable expreſſion; "the tried valour of your people, and *the ſharpneſs of their arrows*, have ſo far advanced the fame of your magnanimous nation above any of the weſt, that terror and dread cannot but ſeize your adverſaries." Lord Lyttelton, vol. iv. p. 28. *notes to ſecond book.*

But the deſire of novelty, the capacity of the human genius, and the rapid progreſs of philoſophy and the arts, have brought about ſuch frequent and abſolute changes in all human affairs; that the manners, cuſtoms

" pains had been taken to cure her, but in vain; for at different " periods of the year, an inflammation came on, which was " ſucceeded by a partial mortification. She told him, that the " wound was eaſily healed up; but in two months afterwards, " there was a certainty of its breaking out again, and this had " been the caſe for many years." *Paterſon's Travels.*

Digitized by Google

and arts of former times, are often ſcarcely to be traced, in the inquiries and reſearches of the moſt active and diligent antiquarian. As muſt be expected in ſuch a revolution; thoſe arts moſt conducive to the welfare of ſtates, have met with the firſt and greateſt alterations. And we find that no one has, in all reſpects, undergone a greater change, both in principle and practice, than the art of war. Hence, inventions, which in times paſt were deemed moſt excellent, and even maſterpieces of art; after having once made way for others, calculated (or at leaſt ſuppoſed to be better adapted) to attain the ſame end, and promiſing more powers and perfections, have ſunk into neglect, and been long conſigned to oblivion. Yet have we not always profited by the exchange. On the contrary, in this age we frequently deplore the loſs of arts, which flouriſhed ſome centuries ago; and which we find are not now to be revived; arts which we too late acknowledge to have had no rival. There have, in all ages, been men, who were decided opponents to every *new* invention: but this obſtinate and wilful blindneſs to merit, genius and uſeful diſcovery, has ſerved only to encreaſe their energy and progreſs. Old and new ſyſtems and diſcoveries can rarely be united; it generally happens, that in the ſtruggle, one is triumphant, and the other looked upon with contempt or indifference, and at laſt for ever forgot. One of our firſt philoſophers and poets, has divided the life of man into *ſeven* ages. In imitation of his example, we may diſtinguiſh the exiſtence of every art, by *five* evident periods; namely, its *birth*, *progreſs*, *perfection*, *decline* and *fall*. Periods, which hiſtorians aſſume, in their correct details of the revolutions of Empires; and in the ſequel of this treatiſe, we ſhall be able to trace, and aſcertain theſe diſtinct times in the hiſtory of the Engliſh *long-bow*.

SECTION

Digitized by Google

SECTION II.

Introduction of the Bow into Britain—Partiality of our Anceſtors for it—founded upon ſolid reaſons—their reluctance to abandon the uſe of it.

IT ſeems ſcarcely poſſible to aſcertain, (with any degree of preciſion) the exact period of time when the bow was *firſt* introduced into *Britain* (8). Mr. Moſeley thinks it probable, that the bow was *introduced* into Britain, (as a military weapon) by the Romans, (*Moſeley*, p. 210.) Cæſar certainly had *archers*, when he firſt landed in England. *Comment.* But the Roman archers were chiefly auxiliaries, and their moſt expert bowmen Cretans, who, Mr. Sandys (*Relation of a journey*

(8) The author of theſe tracts has been not a little ſolicitous, and not wanting in the labour of a diligent reſearch, to diſcover and trace the uſe of the *wooden* bow, among European nations in early times; with a view to find out, if it had made any figure in hiſtory, previous to the battle of Haſtings. But in this attempt the moſt authentic ancient hiſtorians (whoſe works have ſurvived the wreck of time,) afford but trifling aſſiſtance; the Roman hiſtorians relate but little of thoſe nations not ſubjugated to the power of Rome; and we have neither any very ancient nor accurate hiſtory of their barbarian invaders. Cluver (the author of the *Antiquities of Germany*) tells us, "that the only people of Germany who uſed the bow, were the Finlanders and the Goths, "who bordered on the left and mouth of the Viſtula; but what "was the *form* and *kind* of bow uſed by them, is (he obſerves) "to be inveſtigated: and that Marcellinus ſays, that the bows of "all nations were formed of bent ſpears or poles, *(flexis haſtilibus)* "except thoſe of the Scythians or Parthians, who, in ancient "times, uſed the ſame form of bow, as they had then." This

Digitized by Google

ney to the Mediterranean and other parts anno 1610.) obſerves, "uſed the *Scythian bow*, but much better than "the Scythians." The uſe of *this* bow was continued among the Romans, long after the diviſion of the Empire: and Mr. Gibbon, (vol. iv. p. 130.) informs us, "that in the ſixth century, they placed their great "reliance upon it in the African war." As the Scythian bow was made of horn, the art of fabricating it was probably then, (as it has been for centuries paſt,) confined to the nations that uſed it; and it is not to be ſuppoſed, that the Engliſh could eaſily have obtained from their conquerors, the arms, or the ſecret of forming the weapons, by which they had been ſubdued. And as the uſe of the *horn* bow is not to be traced in the annals or traditionary hiſtories of this kingdom, we may conclude, that the Engliſh were unacquainted with it. In a preceding note (*note* 8.) an endeavour has been made, to trace the uſe and progreſs of the *wooden*

Mr. Gibbon (vol. ii. p. 270) calls the *long Tartar* bow. Cluver obſerves, "that as to other bows, Marcellinus only means, that they "were very long (*prælongi,*) as were thoſe uſed in England, and "among other nations, which equalled the height of a man." It is probable, that ſome of the Gothic tribes who invaded the Roman empire, uſed the *wooden* bow. That they uſed the bow is certain; and hiſtorians inform us, that in their firſt encounter with the army of the Emperor Decius (*anno Domini* 251,) his ſon was ſlain with an *arrow*, in the beginning of the action. Macou (who quotes Mauricius) in his *Hiſtory of the ancient Germans*, ſpeaking of the Sclavonians, ſays, "utuntur quoque arcubus *ligneis*." The northern Goths, who came originally from Scandinavia, were the forefathers of the Normans; the latter, Mr. Gibbon obſerves, "had long been con-"cealed by a veil of *impenetrable* darkneſs, and ſuddenly burſt forth "in the ſpirit of naval and military enterpriſe." The Normans (after carrying their arms into Germany, Italy and France,) in the eleventh century, achieved the conqueſt of England; principally, as our hiſtorians relate, by means of the *long wooden bow*, which probably was known to moſt of the inhabitants of Scandinavia, (in the northern parts of which it is at this day uſed in the ſports of the field): but we do not read of any material diſplay of its powers, till the battle of Haſtings.

bow

Digitized by Google

bow in Europe, to the time of the invaſion of England by the Normans. The Danes, who as Speed obſerves, "were a branch from the ſame root," could not be ignorant of this weapon; the uſe of which probably extended to their neighbours the Saxons; although Strutt in his *Horda Angel-cynnan* notices, that among the firſt Saxons who came into Britain, there is no mention of the bow, and that the axe was their principal weapon. Hiſtorians have given very confuſed and contradictory accounts of the introduction of the bow into Britain. John Roſs (the Antiquarian) although he informs us that the Britons uſed bows on the arrival of the Saxons; yet in ſpeaking of the battle of Haſtings, he tells us, "that the "Normans had the victory, eſpecially by means of their "long (9) bows and arrows;" and adds, "that William "encouraged

(9) It has been ſuppoſed, that at the memorable battle of Haſtings, Duke William had croſs bows, as well as long bows, in his army. And ſome hiſtorians and poets in their details of this battle, have armed William himſelf with a *croſs-bow*, conformably with the report, that he was ſo ſtrong a man, as to have been able to bend this kind of bow, when on horſeback.

The troops William commanded, being (as we are told) collected from various parts, were no doubt differently armed; and probably the Genoeſe bow, or croſs bow, (which we find was afterwards ſo conſpicuous at the battle of Creſſy,) was brought over by William with ſoldiers from Italy. In *Ducarell's Anglo-Norman Antiquities*, will be found an engraving (taken by Smart Lethieullier, Eſq. and publiſhed by Bernard de Montfaucon, in his work intitled *Les Monumens de la Monarchie Francoiſe)* of a piece of tapeſtry found in the cathedral of Bayeux in Normandy, which he tells us was "by tradition called Duke William's toilet, "and ſaid to be the work of Matilda his queen, and the ladies of "her court, after he obtained the crown of England." This tapeſtry repreſents the entire hiſtory of the Norman invaſion, and the battle of Haſtings. It is divided into ſeveral compartments, in all of which, the conqueror is figured in a coat of mail, with an iron *club* or *mace* in his hand, and generally mounted on his charger. We ſee in this work many archers, but they *all* have *long* bows. Some credit will attach to the accuracy of this hiſtoric repreſentation, as it was not only fabricated immediately after the event, but under the eye of William, and therefore leſs liable to error. And

ſurely

Digitized by Google

" encouraged his troops, by aſſuring them that the " *Engliſh had not any archers in their army.*" He is followed by Speed, Echard, Lord Lyttelton, Sir John Hayward, and others, ſome of whom aſſert, that at the battle of Haſtings, the Engliſh were *aſtoniſhed* at being ſtruck with arrows, before the battle joined, and by enemies *at a great diſtance.* While other hiſtorians (as Mr. Moſeley obſerves,) do not notice this ſurpriſe. Stow ſays the Engliſh at this battle "*ſhot* darts." *Annals.*—Our great antiquarian Camden tells us, that the bow was firſt "*ſhewed* to the Engliſh by the *Danes*, " and was *brought in* by the *Normans.*" *(Remains.)* Aſcham ſays, that Sir Thomas Eliot informed him, " he had read in an exceeding old chronicle, that the " firſt Saxons brought with them the bow, in the time " of Vortigern, with which principally they ſubdued " the Britons." In ſupport of what Sir Thomas Eliot notices, we may refer to an authority (probably the very authority alluded to by him,) which is Henry of Huntingdon; who informs us, that in the twenty ſecond year of the reign of Kenrick and Ceaulin (Saxon Monarchs) a great battle was fought between the Saxons and Engliſh; in which the Engliſh diſpoſed their *archers (viris ſagittariis)* and light-armed troops after the manner of the Romans: this battle happened about the year, 560. *(Scrip. poſt Bedam. p.* 180. *b.)* In the *ninth* century (according to Aſſerius) we find the bow

ſurely it better accords with our ideas of military operations, and the known practice of the great military leaders in former ages, that William (who had a very arduous and active part to perform, and who, by all hiſtorians, is ſaid to have conducted that battle with great ſkill, vigour, and bravery, frequently exhorting and leading on his troops, and ſo indeed he appears in the Bayeux tapeſtry) ſhould have prefered a ſimple weapon of defence, to a very cumberſome weapon of offence; the uſe of which latter required conſtant attention, and was, in its nature, fit only for a *foot* ſoldier.

in

Digitized by Google

in the hands of our renowned Alfred, who ſeems to have beſtowed much attention upon it, and no doubt had frequently proved its value, as a weapon well calculated to enſure both the ſports of the field, and the diſmay of his enemies. The greater probability (and which may ſerve to reconcile the different accounts of hiſtorians) is, that at the time of the battle of Haſtings the long bow had not become a *general military* weapon in this nation. And even ſuppoſing that Harold had his archers; yet the effect of *numerous* and *well diſciplined* bands of archers, giving regular and ſucceſſive diſcharges of arrows, (and perhaps from better made bows than what Harold's army poſſeſſed,) might well have created aſtoniſhment and diſmay among his troops. However the battle of Haſtings muſt have fully convinced the Engliſh, of the value and ſuperiority of the long-bow, as a weapon of war; and no doubt, from that period, it became with them, and was deemed by their Norman conquerors, an object of the firſt attention; for Sir John Hayward obſerves, "that the Engliſh being "trained to the uſe of it, became the *beſt ſhooters* in the "*world.*" Mr. Barrington tells us, "that there is not "*any account*, when ſhooting with the long-bow among "the Engliſh firſt began; and that the *uſe* of *archery*, as "expreſsly applied to the croſs or *long-bow*, is not *men-* "*tioned* by our chroniclers, till the death of Richard I. "who was killed with a croſs-bow; and that after this, "(which happened in 1199) there appears not upon "record, any notices of archery, for nearly *one hundred* "*and fifty years*; when an order was iſſued by Edward "III. in the 15th year of his reign, for providing bows "for the war againſt France." Mr. Barrington indeed does not vouch for accuracy or inveſtigation upon this ſubject, but obſerves, "that he has not happened to "*ſtumble* upon any paſſage which contradicts his aſſer- "tion."

Digitized by Google

" tion." An attentive perusal of our chroniclers and first historical writers, will afford us considerable light in this enquiry. We read of archers in the civil contest between Stephen and Matilda; but in the reign of Henry II. the bow appears to have been well known, and in great use as a weapon of war in England. Lord Lyttelton *(vol.* ii. *b.* 2. *p.* 157.*)* speaking of the army of Henry the second, observes, that about *this time* " the infantry for the most part, consisted of *archers* " and slingers;" and we find Henry II. frequently triumphing, by the power of archery. Even before the year 1199, archers are noticed in the armies of both English and Scotch. The same writer tells us, " that " at the battle of Cuton Moor in Yorkshire, (22d " August, 1138) between Henry II. and David King " of Scotland," *both* armies had their *archers*, " and " that those of Henry terribly galled the Galwegians, " and obliged them to quit their post, after they had " compelled his men at arms to give way." In this reign, we find the Welch celebrated as very expert archers. Giraldus their chronicler (who was Henry's cotemporary) has noticed some of their remarkable feats of archery; and Henry himself, during his expedition into Wales, affords a sufficient proof of the fact; having twice nearly lost his life by the blow of an arrow shot from a Welch bow. (Lord Lyttelton, *vol.* ii. *p.* 57. Warrington's *Hist. of Wales*, *vol.* i. *b.* 6. *p.* 494.) Mr. Barrington seems to have forgot, that the *most celebrated* archer this country ever boasted, "*played his pranks*," (Dr. Fuller's phrase) in the Reigns of Henry II. Richard I. and Henry III. *(See notes to the new Garland.)* And even *half a century* before the order issued in the reign of Edward III. (noticed by Mr. Barrington,) was fought in the reign of Edward I. anno 1298, the great battle of Falkirk, in which 12,000, or

as

Digitized by Google

as ſome ſay 50,000 Scotch were left dead upon the field, while the Engliſh had not *an hundred* ſlain. Each army had its archers; but our hiſtorians obſerve, that about *this time* the Engliſh archers began to excel thoſe of all other nations. *(Goldſmith's Hiſtory of England.)* It may alſo be noticed, that Richard I. performed great exploits with his archers, in the Holy-Land; particularly, as Sir John Smith obſerves, "by overthrowing (principally by the wonderful effect of his archers,) the brave Saladin and his whole army." *(Diſcourſe on weapons.)* Mr. Gibbon alſo takes occaſion to notice, the ſingular dread with which the Engliſh archers filled their enemies in the *Cruſades*, and informs us, "that at one time, Richard with ſeventeen knights and *three hundred archers*, ſuſtained the charge of the *whole Turkiſh and Saracen army*." *(chap. 59.)* Mr. Barrington tells us, that Richard himſelf uſed the *croſs-bow*, in this expedition, and he quotes Vineſauf as his author, for the truth of the remark. However this may be, no doubt is entertained, that his Engliſh archers uſed any other than the *Engliſh long-bow* (10). Giraldus informs us, "that three thouſand Welch, the moſt expert in archery, and the uſe of the pike, engaged to go into the Holy-Land at the inſtance of the

(10) Whoever is deſirous to ſatisfy himſelf better upon this head, may poſſibly find ſomething to his purpoſe, by conſulting *William Archbiſhop of Tyre, Radulphus Cadomenſis. Galfridi à Vineſauf Itinerarium Regis Anglorum Richardi et aliorum in Terram Hieroſolymorum*, in ſix books, publiſhed in the 2d vol. of *Gale's Scriptores Hiſt. Angliæ*, (p. 247, 429). *Roger Hoveden* and *Matt. Paris* afford likewiſe ſome materials. Speed records a feat of Archery in the Holy Land, performed chiefly by means of an arrow, but from what ſort of bow it was ſhot, is not noticed. "Certainly, (ſays he) Hugo de Neville one of Richard's ſpecial familiars, is recorded to have ſlain a lion in the Holy Land, driving firſt an arrow into his breaſt, and then running him through with his ſword." *Hiſt. of Great Britain.*

"Archbiſhop

Digitized by Google

" Archbiſhop of Canterbury, anno 1188." *(Warrington's Hiſtory of Wales, vol.* i. *p.* 175.*)* It is true, that our chroniclers do not always mention the long-bow by *name*, and we read, that in the reigns of King John and Henry III. the *croſs-bow* was uſed in England. *See a deſcription of the battles of Cheſterfield* and *Lincoln*, in the reign of King Henry III. *(Archæologia, vol.* ii. *p.* 276, *and vol.* viii. *p.* 195.*)* But it is probable, that the uſe of the latter was chiefly confined to the *foreign troops* then in England. And we may obſerve, that our hiſtorians ſeldom uſe the term *archer*, when they mean a *croſs-bow-man*.

That our anceſtors paid to the *long-bow* (11) the higheſt veneration, and that their affection, or (as the introducers of fire-arms termed it) their prejudice for the continuance of it, was founded upon the moſt ſolid grounds, no one acquainted with the Engliſh hiſtory can for a moment doubt:—It had long been the ſafety of the realm (12), and had led the Engliſh to the greateſt and moſt extraordinary victories, that hiſtory had to re-

(11) The bow uſed by the inhabitants of this iſland, has always been diſtinguiſhed by the title of the *Engliſh long-bow*. Mr. Barrington ſays, it was thus called, to diſtinguiſh it from the *croſs-bow*. Paulus Jovius calls it the *great* Engliſh bow. It might acquire the title of the *long*-bow, in contra-diſtinction to the bows uſed by moſt of the Eaſtern Nations, which were ſhort, being compoſed chiefly of horn. (*See Marcellinus's* Obſervations ante, note 8.) Although the Engliſh do not claim the merit of its firſt invention, yet the wonders it has performed in the hands of our anceſtors, (who we find at a very early period adopted and foſtered this their *darling* weapon,) very naturally and ſignificantly annexed *their* name to it.

(12) Sir John Forteſcue ſays, again and again, that the "myghte of the realme of Englande ſtandyth moſte upon "archers." *Treatiſe of abſolute and limited Monarchy*. This obſervation is acknowledged by ſeveral acts of parliament, particularly the ſtatutes of 33 *H.* 8. c. 9. and 13 *Eliz.* c. 14. quoted poſt.

cord;

Digitized by Google

cord; ſecuring their peace at home, and planting in the minds of their enemies a rooting terror, that did not terminate with them even in the grave; but ſurvived, and was handed down to ſucceſſive generations. It was the weapon, of all others moſt ſuited to their *genius*, *proweſs* and *ſtrength*;(13) with which they had been accuſtomed

(13) Sir John Smith obſerves, that the bow was the ſingular *gift of God* to the Engliſh nation. And Aſcham writes, that neither the French, nor even the Scots, could ever rival the Engliſh nation in archery. Patritius, an Italian, (who wrote on military affairs, in the reign of James I. ſays, "that ſhooting in "the long bow was a ſkill almoſt appropriated to our nation, "and that neither the Italians, Spaniards, French, or Dutch had "been accounted archers for five hundred years." With reſpect to the uſe of the bow in *France*, Sir John Smith gives us the following ſingular account. "The French king and ſome other "princes, did in times paſt, eſtabliſh laws and orders for the uſe "of the long bow, and our manner of ſhooting; that they might "be able to encounter us with our own weapon: and to the in-"tent that they ſhould become good archers, granted unto all "who became perfect in that weapon, great privileges and re-"wards; ſo that the Engliſh long bow was practiſed in the "*greateſt* part of France many years. Yet in the end, the French "king, and the captains of many nations did manifeſtly ſee, that "neither the French, nor any other nations, with any exerciſe, "could attain to ſhoot ſo ſtrong, and with that dexterity and "excellence that the Engliſh nation did; whereby they, ſeeing "that our manner and uſe of ſhooting in our ſort of long bows "was a very peculiar gift of God, given unto our nation; they "left the practiſe and uſe of that weapon, (ſaving only to ſhoot "at ſhort butt for ſport) and returned again to the uſe of the croſs "bow; and of later years to the harquebuſs." *Harl. MSS.* Sir John Smith probably alludes to an eſtabliſhment of four thouſand archers attempted in France, about the year 1444, every pariſh being obliged to furniſh one. *Note to Barrington's Obſervations on Archery. See Parquiéres Reſerches de la France*, p. 133, and *Hiſtoire de la Milice Francoiſe par le P. G. Daniel, tom.* i. *liv.* 4.

Mr. Barrington (ſpeaking of archery in England and *Scotland*) obſerves, "that as there was no material difference, between the "activity and bodily ſtrength of the two people, it might be ſup-"poſed, that the Engliſh and Scots wielded the bow with no "unequal vigour and dexterity; but from undoubted hiſtorical "monuments, it appears, that the former had the ſuperiority." And Aſcham further tells us, "that notwithſtanding James I. "of Scotland procured an act of parliament to be paſſed, obliging "every

Digitized by Google

cuſtomed to form an acquaintance, very early in life; and it may, with truth, be ſaid to have been the *toy*

" every Scot (under an heavy penalty,) to learn to ſhoot; yet " neither the *love* of their *country*, the *fear* of their *enemies*, the " *avoiding* of *puniſhment*, nor the *receiving* of any *profit*, could make " them good archers, who by nature were not apt for archery; and " that they themſelves bore teſtimony to the remark, by making uſe " of a proverb, whereby they candidly gave the whole praiſe of " ſhooting to the Engliſh: ſaying, that *every Engliſh archer beareth* " *under his girdle twenty-four Scots.*" *Toxophilus.* Notwithſtanding theſe opinions, we muſt be permitted to obſerve, that the diſinclination for archery ſhewn by the Scotch (a people brave, hardy, diligent, and poſſeſſed of much muſcular power) was more owing to their partiality for other weapons, than to any *natural diſability*. Every nation is naturally partial to the weapon it has been long acquainted with, and to the uſe of which its people have been trained from infancy. The Engliſh themſelves afford an inſtance in point, in the great attachment they ſhewed to the bow. The Scotch too had their favourite weapon, (the broad ſword and target,) with which even in modern times, they have performed very noble ſervice in the field. And we may remark, that as far as *modern* archery extends, it affords a proof of the obſervation: ſince from the time of the inſtitution of archery in Scotland, it has in that country met with very great ſupport; and at this day, Scotland can boaſt of many ſkilfull bowmen. But Aſcham appears to have been not only ſomewhat *harſh*, but alſo ſomewhat *incorrect*, in this remark concerning the Scotch nation. It is true, that James I. of Scotland, was particularly anxious to eſtabliſh the uſe of the bow in that nation; and to that end, enacted laws, prohibiting the games of foot ball and Golf, and enforcing the practice of *archery*. But it ſeems that after the death of that monarch, the national habits prevailed, and among an hundred attendants of a Baron, hardly *ſix archers* could be found, the remainder reſuming their ſpears. James II. alſo made a ſimilar attempt, to ſupport the uſe of the bow in the Lowlands of Scotland, which proved ineffectual. However, that weapon met with greater encouragement in the Highlands. In deſcribing the army of James III. in 1488, Lindſay enumerates no leſs than *ten thouſand Highlanders* with *bows*, under the Earls of Huntley and Athlone. The author of the *preſent State of Scotland*, (1682) mentions, (p. 6) bows and arrows as the *chief* weapons of the *highlanders*, even of that period. *Pinkerton's Hiſt. of the Scots*, vol. i. p. 163, 425.

As to the *Welch*, they were always famous for ſtrength and dexterity in drawing the bow. The men of the province of Guent, or Monmouth, (which was formerly a part of that kingdom) were accounted the beſt archers, not being inferior in the uſe of the long bow

to

Digitized by Google

toy(14) of their infancy, the *pride* of their manhood, and the *boaſt* of their old age. Nor was this all, it bore in their minds an ineſtimable value, on another account; for while it freed them from the fear of a foreign foe, it enſured their liberties, from the rapacity of an homebred tyrant. The univerſality of its practice had a moſt happy effect in this kingdom; ſince, when it readily furniſhed the realm with defenders, and the King with an army to chaſtiſe a continental foe; at the ſame time, it operated moſt powerfully in favour of liberty, by enabling every one (whenever the Monarch exceeded his juſt prerogative, and broke through the ties of his ſolemn compact with his people, to tyranniſe over them;) to meet him in the field, ſupported even by a regular army, with *equal weapons* and *equal ſkill*. (15) Add

to the Normans themſelves. *Ld. Lyttel.* vol. 2, b. 2, p. 157. Among the old Welch game laws, we find one, which prohibited any perſon from ſhooting at a beaſt when at reſt, that was appropriated for the chace; on pain of forfeiting his bow and arrows to the lord of the manor; though he might ſhoot at and kill any ſuch, if he could, when the dogs were in full cry; but he was not allowed to ſhoot among the dogs. *Warrington's Hiſt. of Wales*, vol. 1, p. 183. The Iriſh do not ſeem to have been much acquainted with the uſe of the bow, till the reign of Edward IV. who enforced the practice of it in that nation (among the Engliſh reſidents, and their Iriſh ſervants) by ſeveral acts of parliament. The hardineſs and natural ſtrength of body poſſeſſed by that people, muſt have given them great advantage in the uſe of this weapon.

(14) The author of the invention of fire-ſhafts for long-bows (publiſhed 1628) obſerves, that "as *Rackets* are among the French, "ſo *bows* are the *natural paſtime* of the Engliſh." The propenſity to archery in youth, is ſeen in every village in England; moſt boys being fond of making an inſtrument, ſomewhat in the ſhape of a bow; though in general, the imitation is very indifferently executed. Mr. Saltzman, (in his *Gymnaſtic Exerciſes for youth*,) makes a ſimilar remark.

(15) So long as the Engliſh continued the uſe of the bow in war, and all ranks of men practiſed archery, no leſs as an amuſement, than as an introduction to its firſt great object; ſo long were they completely an *armed* nation; and as ſuch, *invincible*;

Digitized by Google

Add to this, that archery had attractions and charms of a different nature. The exercise of it afforded an amusement, which was followed by the most eminent men in the nation; and not only tended much to preserve the blessing of health, and prolong life, but braced the nerves, and brought with it a considerable accession of strength to the body (16). Could then this attachment to the bow be looked upon as unnatural, or be deemed ill founded, or ill judged; or was it not to be expected, when a total change of weapons was proposed? Our ancestors by *experience* knew the *use* of the bow, they had long witnessed its *effects* in their hands, and had every reason to be satisfied with them. They very reasonably feared to hazard the loss of this weapon, in exchange for one of very modern introduction; which that experience had taught them was inferior to the bow; the English arrow having frequently rendered this new weapon useless, and beaten it out of the hands of the enemy. If they were guilty of error, in their comparative estimate of the value and effects of the two weapons; it may be urged (and not untruly) that it was not till *long* after the introduction, and many gradual steps of improvement in the construction and use of fire arms, that the patrons of them

for history satisfactorily proves to us, that an hostile army, however well disciplined, must ever invade a *whole people* naturally brave and trained to the use of the most effectual weapons of war, without the smallest chance of conquest, and with an almost absolute certainty of being speedily annihilated. The English, armed with the *long-bow*, could have little to dread from a standing army (though entirely devoted to the interest of the prince) the dread of modern patriots. The general knowledge of the use of the bow among all ranks, made rebellion doubly formidable; and to that may be principally ascribed the bloody conflicts during the civil wars.

(16) How far archery merits attention on this account, is fully noticed in a subsequent part of these tracts. *(Part 2. Chap. 1. sec. 1.)*

after

Digitized by Google

(after repeated experiments) were enabled to form ſuch a judgement of their effect, as to venture them in competition with the bow. The invention of gunpowder, and the effect of it, when confined in a tube, was moſt ſingular and ſurpriſing. This hitherto unthought of *terreſtrial* thunder and lightning, might well appal a nation of the braveſt warriors. But notwithſtanding their aptitude to aſtoniſh the whole creation, men as well as brutes; yet the writers of the times (Sir John Hayward, Sir John Smith and others,) obſerve, that when the former became accuſtomed to the "*noyſe and* "*cracke*" they made, and found that their terrors were more *imaginary* than real, they began to undervalue them: and probably, meaſuring their computed *ultimate* effect, by that of the bow, (which did not ſeem to promiſe or to be capable of affording any great improvement, or acceſſion of power;) they were little inclined to believe in proſpect, the ſtill greater powers which fire arms by degrees began to unfold. And it was not till they had approached nearly to their preſent degree of perfection, and became a chief object of attention in war on the continent of Europe; and until the uſe of them was enjoined and enforced in this kingdom; that our bowmen could be brought to abandon, what they had been taught to look upon for ſo many ages, as the very *pillar* of the ſtate.

Digitized by Google

SECTION III.

Memory of the Bow ſtill cheriſhed in England—Advantage gained to our Enemies by the relinquiſhment of it, as a weapon of War—Preſent ſtate of the Bow in England—Probability of the partial revival of military Archery in England—Neglect of it diſapproved.

ALTHOUGH the Engliſh were at length compelled to relinquiſh their favorite weapon; the memory of it was ever dear to them. Nor has a long intervening period of time, the ſucceſſion of many ſubſequent generations, and the complete change which all human affairs have undergone, totally extinguiſhed that energy, which the bow once impreſſed upon the minds of *Engliſhmen*. The ſpirit of military archery is indeed greatly damped; but perhaps it is not entirely extinct, in this nation. Few I muſt believe there are, who at this day can peruſe (either in poetry or proſe,) the details of the famous battles of Creſſy, Poictiers and Agincourt, without feeling ſome touches of that reſpect and veneration for the bow, which our anceſtors ſo often acknowledged, and ſo warmly cheriſhed. And whatever may be the value of the modern weapons of war, let him who reads the hiſtory of modern times, look narrowly to find, if but *once* (ſince the days when *archery* flouriſhed,) " with our *twelve thouſand* or *fifteen* " *thouſand* we have defeated an army of *fifty thouſand* " or *ſixty thouſand.*" Or if our *new* weapons have ever " afforded

Digitized by Google

afforded us *paralells* to the victories, obtained with the *long-bow* (17). And may not the advocate for the bow, fairly aſk thoſe who have recently ſerved in France, if the old proverb, (which our archers ſo often won) "*that one Engliſhman would beat three Frenchmen; and* "*that the Engliſh would never fly, nor ever yield,*" *(Montluc's Commentaries)* is ſtill current there; or if the French nation has not (ever ſince the diſuſe of the long-bow by the Engliſh,) exulted and exclaimed, (as Mr. Barwick tells us, they did upon its decline in his time:) "Non, non Anglois, votre cauſe eſt bien ſalle, "car Dieu nous a donnes moyen de vous encountrer "apres un autre ſorte que en ce temps paſſe. *No, no* "*Engliſhmen, your caſe is become fowle, for God hath* "*given us means to encounter with you after another* "*ſorte than in times paſte.*" There was indeed a time when, as Clement Edmonds obſerves, "the Engliſh "nation carried a *ſcourging* hand in France." *Sed tempora mutantur.*

Let not any one ſuppoſe, from what I have ſaid, in

(17) "What though with our 12,000 or 15,000 we have oft "defeated their armies of 50,000 or 60,000; ſtands it with rea- "ſon of war to expect the like ſucceſs ſtill? eſpecially ſince the "uſe of arms is changed, and for the bow (proper for men of "our ſtrength,) the *caliver* begins to be generally received." *Lord Herbert's Life of Hen.* 8. *p.* 18.

It was remarked on the eve of the battle of *Agincourt*, (ſo fatal to the French and ſo glorious to the Engliſh;) that the former recollecting with ſhame, that for the ſpace of a whole *century*, they had in all their encounters with the Engliſh, been beaten by them, and confiding in their extraordinary ſuperiority of number; being near 160,000, while the Engliſh army did not conſiſt, even according to the accounts of the French Hiſtorians, of more than 25,000; buoyed themſelves up with the hopes of a certain and "ample retaliation, and an eaſy victory. "Of this they indeed, "made themſelves ſo ſure; that they had reſolved to put every man to the ſword, except the King and ſome nobles, and even "played at dice for the priſoners they *deſigned to take.*" *Goodwin's Hiſt. of the reign of Hen. V. p.* 82.

Digitized by Google

ſpeaking of the great eſteem, in which the bow has for ſo long a period been held; that I aim at diſparaging the uſe and effect of muſketry: far otherwiſe are my thoughts and intention. For while I am paying a juſt tribute of remembrance and applauſe, to the *fallen* pillar, upon which the trophies and emblems of our national glory were once diſplayed; I am ſenſible, that our valour and our efforts in theſe times, merit the higheſt encomiums, and that the weapons we now uſe, are common to moſt nations, and perhaps beſt calculated for the modern ſyſtem of war. No, in common with other men, I have only to lament, that the new invented weapons of our enemies ſhould compel us to yield the ſuperiority, our own once purchaſed and long maintained for us, and to cope with them, upon their own terms; for ſuch moſt undoubtedly has been the effect of the change of weapons, ever ſince it fully took place. Our enemies far out-number us, and the weapon we now both uſe, is evidently calculated to throw the advantage on the ſide of *numbers*. And Mr. Barwick notices, that upon the introduction of fire arms in *France*, it was a common obſervation in the mouth of every *Frenchman*, " that the *weakeſt* of them were able to give " greater wounds, than the greateſt and ſtrongeſt archer " we had." Thus, as an Engliſh poet, of the ſeventeenth century writes,

" We to the grey-gooſe wing more conqueſts owe,
" Than to the Monk's invention; for then
" We cull'd out *mighty armes* to draw the bow,
" *Striplings* oft ſerve us *now*, then only men;
" For theſe hot engines equal miſchief can
" Diſcharged by a *boy*, or by a man (18)."

Alleyne's Batt. of Creſſy.

The

(18) The well-informed and accurate obſerver Dr. Johnſon makes the following remark to our purpoſe: " It is (ſays he) thought " by

The bow, indeed, now appears amongſt us only as an inſtrument of *amuſement*, its ancient ſize (and "*pith*," as Aſcham terms it) is changed; and at this day, it is in moſt hands, but a *toy*, compared with what it once was, and might yet be. That archery (I mean military archery) will ever again rear its head in this kingdom, and again become, (to uſe the language of Sir John Forteſcue) "*the myghte of the realme*," is not now to be ſuppoſed: but that it may at ſome future and not diſtant time, become a favourite with the nation and military men, and an *additional* ſupport to our arms, is ſomewhat problematical. There are not wanting in theſe days, men of genius and great ſkill in military affairs, who have experienced the ſerious effects of even *mimic* bows (19); and who have been led to conſider whether it would not be adviſable, once more to admit the Engliſh bowman to a *ſhare* of military glory. The preſent perturbed ſtate of Europe, and the continental expeditions which have of late taken place, and proved upon the whole ſo diſaſtrous; thining the ranks of our beſt ſoldiers: the neceſſity of ſending continual ſupplies of men to our diſtant ſettlements, and at the

" by ſenſible military men, that the Engliſh do not enough avail " themſelves of their ſuperior *ſtrength of body* againſt the *French:* " for that muſt always have a great advantage in puſhing with " bayonets. I have heard (continues the Doctor) an officer " ſay, that if *women* could be made to ſtand, they would do as " well as men in a mere *interchange* of *bullets* from a diſtance; but " if a body of men ſhould come up cloſe to them, then to be " ſure they muſt be overcome. Now (ſaid he) in the ſame man- " ner the weaker-bodied French muſt be overcome by our ſtrong " ſoldiers." *Boſwell's Tour to the Hebrides (October, 1785)* p. 279. This obſervation ſeems to point out the great uſe of the long bow combined with that of the *pike*.

(19) Many Engliſh officers who ſerved in America during the laſt war, bear teſtimony to the miſchief occaſioned in the Engliſh army, by a few natives armed with very ſorry bows. Thoſe who have ſerved in the Eaſt Indies, have experienced ſimilar effects from bows.

Digitized by Google

ſame time, of preparing for threatened invaſions; ſeem to ſuggeſt the propriety of the uſe of archery, at leaſt *at home*. This combination of circumſtances has given birth to a recent very ſenſible and patriotic publication (20), in which, the advantages to reſult from a *partial* revival of *military* archery, are plainly pointed out, and convincingly proved.

The ſtruggle for pre-eminence between the bow and fire-arms, cauſed no ſmall difference of opinion among the military men of the times; each was partial to the weapon he had been moſt accuſtomed to uſe. And Alleyne, (whom I have before quoted, an advocate for the bow) tells us,

> "That the white faith of Hiſt'ry cannot ſhew,
> "That e'er the *muſket* yet could *beat* the *bow*."
>
> *Battle of Creſſy.*

Certain it is, that the bow did not fall into neglect without the diſſatisfaction of many, and the oppoſition of ſome of the beſt ſoldiers and judges of military affairs of the age. Among others, was Sir John Smith, a gentleman who had ſeen much ſervice, and who took great pains to ſet forth the advantage of continuing the uſe of the long bow, in ſuch a forcible appeal to all men, that Mr. Barwick, (his fellow ſoldier, who ſeems

(20) *Maſon on the Revival of the Long Bow and Pike.* In the reign of Charles I. Neade publiſhed a book upon the ſame ſubject, and obtained a commiſſion under the great ſeal for teaching the combined management of the pike and the bow. Markam in his *Art of Archery* propoſed the ſame. Lord Herbert tells us, that of the ten thouſand men ſent againſt France by Henry VIII. five thouſand of them were archers; "who beſides their bows "and arrows, carried *halberts*, which they pitched on the ground "till their arrows were ſhot, and then took them up again to do "execution on the enemy. This (he obſerves) was an excellent "part of military diſcipline, and yet not remarked by our Engliſh "chroniclers." *Life and Reign of Henry VIII.* p. 20. At the battle of Agincourt, the archers wore by their ſides, *battle-axes, ſwords* and *daggers*. *Goodwin's Hiſtory of the Reign of Henry V.* p. 67.

to

Digitized by Google

to have entertained a decided opinion and predilection in favour of fire-arms oppoſed to the bow, and no great partiality for Sir John Smith) in a treatiſe written by him, (in anſwer to Sir John Smith's obſervations upon the uſe and effect of the bow, and in which he moſt impatiently inveighs againſt Sir John Smith's opinions) declares, "that he had held conference with divers "perſons, of ſundry callings, touching ſome part of "thoſe diſcourſes; wherein he found ſo many addicted "to the opinion of Sir John Smith, touching the com-"mending of the archery in England; with ſo many "reaſons and arguments by him alledged in that be-"half; that many were thereby perſuaded, that the "long bow is the only weapon of the world for the "obtaining of battails and victories." (21)

This declaration is ſurely no *trifling* proof of the weight annexed by men of all "callings" to Sir John Smith's arguments, which he ſupports by reaſon, and grounds upon actual experiment. The diſcourſe upon weapons of war, written by Sir John Smith, is now ſo rarely to be met with, and is ſo complete and ſatisfactory an hiſtory of the powers of the bow; that few modern archers (moſt of whom are eager to hear any thing that can be ſaid in praiſe of the bow) and perhaps few others,

(21) Sir John Smith wrote a very elaborate reply to Mr. Barwick, chiefly in explanation of his opinions concerning military tactics, and to point out Mr. Barwick's miſinterpretations of his former Treatiſe. This work is not noticed in the account of his life, inſerted by Wood in his *Athenæ Oxonienſes*, who mentions his former works. According to that writer, Sir John Smith appears to have been a complete ſcholar and ſoldier. Wood adds, "I "cannot yet find exactly when he died, only that he was living "and in great eſteem among ſoldiers and learned men in "1595." Mr. Barwick has the *modeſty* to call himſelf (in the title page to his book) "*Gentleman, Soldier, Captain et encor plus oultre.*" But his publication does not appear to give any ſupport to ſo *curious* and *extenſive* a character.

will

Digitized by Google

will be diſſatisfied with an enlarged account of archery; and a narration of the particular feats of valour performed by their anceſtors, (which have long lain by unperuſed, and are not to be met with in the general annals or hiſtory of their country) from the pen of a ſoldier, who had frequently witneſſed the effects of the long bow when oppoſed to fire-arms; and which is brought down to the time when archery ceaſed to be uſed in our wars: eſpecially as this collection of reaſons and facts will enable them to form a more accurate concluſion of the advantages to accrue from the future reintroduction and uſe of the long bow, than can be drawn from a diſplay of its effects, in times, when (however great were the victories it obtained) fire-arms were either not invented, ill conſtructed, or inefficiently uſed. And although ſome very conſiderable improvements have of late been made in fire-arms, (rather indeed by a different conſtruction of the *lock*, and by rendering the piece more *manageable* than by any alteration in *principle*) ſubſequent to the time when Sir John Smith wrote (22), yet even thoſe advantages (great as they are) do not, in the opinion of many, render the bow ſo *inferior* in its effects to the modern firelock, as ſome are apt to imagine.

(22) It appears from Sir John Smith, that the *firelock* came into uſe before he wrote; ſo that he had an opportunity of forming a very good judgment of this improvement in the conſtruction of fire-arms, when compared with the bow. He ſpeaks of *Petronells* and *Snap-hances*. The firſt was probably the old *wheel lock*, (which ſucceeded to the match) the other was the preſent firelock, which loſt the name of ſnap hance in conſequence of the ſubſtitution of a new lock (called an *Engliſh lock*); by which it ſeems there was little or no difference between the ſnap-hance and the *preſent* firelock. See Sir John Smith's *Compariſon between Fire-Arms and Bows*. And the *Introduction to the Plan of Diſcipline compoſed for the Norfolk Militia* (1760) p. 7, note 3.

CHAP-

Digitized by Google

CHAPTER II.

EXTRACTS FROM SIR JOHN SMITH'S DISCOURSE ON WEAPONS.

SECTION I.

Reaſons for the Change in Military Weapons—Defects of the Muſket—Imperfections of the Bow—Quicker Diſcharge of the latter—Quick firing condemned—Superiority of Archers in the Field—Reaſons—Effects of Arrows upon the Horſe—Objections againſt the Bow anſwered.

SIR John Smith prefaces his diſcourſe by obſerving, "that the change made in the military weapons "in this kingdom, was owing to the youth, inexperi- "ence, and vanity of ſome men; who were unable to "offer any ſolid reaſon, and in fact were averſe to "offer any argument at all, for a conduct oppoſite to "the opinion of both Engliſh and foreign commanders "and ſoldiers. Yet their decided wiſh and aim was, "to aboliſh archery, and extinguiſh the exerciſe "and ſerviceable uſe of the long-bow; by which wea- "pon, our anceſtors, with many miraculous victories, "had made our nation famous in Europe, Africa, and "Aſia; and the neglect of which, had been fatal to "ſeveral empires."

He then proceeds to a compariſon, between the bow and

Digitized by Google

and the muſket. In treating of the defects of *fire-arms*, he notices chiefly the following:

" 1ſt, The extreme *nicety* required in *taking ſight*; " which, if the muſketeer fails in (to uſe Sir John " Smith's words) but the length of a *wheat corn*, in " the height, his ſhot is of no effect, although the mark " ſhot at is very large."

" 2d, The *uncertain* flight of the bullet (even at " point blank diſtance,) owing to its being leſs than the " bore of the piece."

" 3d, That fire-arms grow *hot* and dangerous in " ſeven or eight haſty diſcharges."

" 4th, That if the powder is not well corned and " kept very dry, it *fureth* the piece, and carries the " bullet *point blank* but a *little way*, and many times " goes *not off at all*."

" 5th, That when the piece is hung *down*, the bul- " let *falls out*; and that the piece is liable to *ruſt*, " and to be *overcharged*; and in the latter event, to " *burſt*."

" 6th, That the powder ſometimes does not take " *fire*, the rain *wets* it, and the wind *blows it out* of " the pan."

" 7th, That a large body of muſketeers is inſuffi- " cient to reſiſt a much *leſs* body of *horſe*, in an open " plain."

" 8th, That after many *hours* in great encounters " on both ſides, and many thouſand bullets diſcharged " (often within ſhort diſtances); very few men are *ſlain* " or *hurt*." (23)

The

(23) With reſpect to the *two firſt* obſervations, it muſt be admitted, that the beſt formed modern pieces are liable to very great uncertainty in the flight of the bullet; which ariſes chiefly from the difficulty of keeping the arm ſteady in taking aim (particularly when the bayonet is fixed on the piece, which adds a preponderating

Digitized by Google

" The imperfections of the long bow, (ſays Sir John " Smith,) do conſiſt only in the breaking of the bow, " or bow-ſtring; for the which, in times paſt when " there was great accompt made of archery, there " was ſpecial care had, that all livery (24) or war " bows, being of the wood of yew, were longer than " now are uſed, and ſo very well backed and notched, " that they ſeldom or never broke. Beſides that, the " archers did uſe to temper with fire a convenient " quantity of wax, roſin, and fine tallow together; in " ſuch ſort, that rubbing their bows with very little " thereof, laid upon a woolen cloth, it did conſerve " them in all perfection, againſt all weather of heat, froſt,

derating weight to the end of it) and ſufficiently firm to reſiſt and counteract the jar of the piece. The uncertainty in the flight of the bullet (ariſing from the circumſtance of its being leſs than the bore of the piece) is corrected in a very conſiderable degree, by the *riſle-bore*. As to the *third*, although frequent firing certainly furs the piece and leſſens its effect; yet ſo ſtrong is the chamber of muſkets made, in general, that they are, I believe, ſeldom known to burſt. The *fourth* and *fifth* obſervations are obviouſly applicable to modern fire-arms, and afford reaſons in proof of the laſt aſſertion. The *ſixth*, indeed, refers particularly to the *match lock*, (the pan of which was *open*) yet it, in ſome degree, alſo applies to modern fire-arms. The *ſeventh* needs no argument to ſupport it. As to the *laſt* aſſertion, ſee note (46).

(24) Livery bows it ſhould ſeem were made chiefly of the *Engliſh* woods: and Clement Edmonds (*lib.* vii. c. 15, p. 137) obſerves, " that he could not commend them, being for the moſt part " heavy ſlugs, and of greater weight than ſtrength, and of more " ſhew than ſervice." Our ſtatutes on archery make mention of *wych*, *haſel*, *elm*, *aſh*, *auburne*, and other reaſonable trees (according to their powers) as affording bow woods. See *Stat. of* 33 *H.* 8. c. 9. and the *Iriſh Stat. of* 5 Ed. 4. c. 4. The ſtatute of the 8 Eliz. c. 10. deſcribes *three* ſorts of bows, viz. *outlandiſh yew* of the *beſt* ſort (which that ſtatute forbids to be ſold for more than 6s. 8d); the *ſecond* ſort for more than 3s. 4d. and the *coarſe* ſort (called *Liveray* bows) for 2s.; at which laſt price *Engliſh* yew was thereby fixed.

and

Digitized by Google

" and wet: (25) and the ſtrings being made of very
" good hemp, with a kind of water-glue, to reſiſt wet
" and moiſture; and being by the archers themſelves
" well whipt with fine thread, they did very ſeldom
" break: but if any ſuch ſtrings did happen to break
" in time of ſervice, the ſoldiers archers had always
" in readineſs, a couple of ſtrings more, ready whipt

(25) The long bow (when unſtrung) was carried in a woollen or waxed-cloth caſe, to preſerve it from wet and moiſture. The bow ſtrings of the *Dahæ* at the battle of Magneſia (between Scipio and Antiochus) are reported to have been relaxed by a *fog*. *Rollin* vol. 8, p. 263. Poſſibly their ſtrings were made of what Aſcham calls *Bullock's Thermes* (or thongs), of which, he ſays, many bow ſtrings of the ancients were made. It is a ſingular fact, that our hiſtorians (following Mezeray the French chronicler) have remarked, that at the battle of Creſſy, the ſtrings of the Genoeſe croſs bows were ſo much relaxed by the heavy ſhower of rain which fell previous to that battle, as to have been of little ſervice. Some writers indeed do not notice this diſadvantage on the part of the croſs bowmen, but only the ſuperior effects of the Engliſh long bow. Muratori has given us a more credible and ſatisfactory account of this matter, attributing the deficiency of the Genoeſe bows, not to the effect of the rain upon their *ſtrings*, but to its effect upon the *ground*; which was ſo ſoft, that when they attempted to put one foot in the ſtirrup of the croſs bow, in order to charge it, the other ſlipt from under them. As this circumſtance ſeems worthy the attention of the accurate hiſtorian, I ſhall quote the paſſage from Muratori, in his own words: " Mezerayus in " Hiſtoria Gallica narrat, quum ex improviſo cecidiſſet imber " effuſus, Genuenſes ad pugnam lentos proceſſiſſe, quoad conten- " derent arcuum ſuorum chordas a pluvia debilitatas, ſeque prop- " teria impotentes ad prœlium; eaque de cauſsâ, veluti proditores " a ſubſequentibus iratis Gallis, fuiſſe trucidatos. Audi nunc " auctorem vitæ Nicholai Laurentii, ſive Hiſtoriæ Romanæ in " hoc opere edendæ, qui iis ipſis diebus ſcribebat: *Era ſtata* (in- " quit ille) *un poco di piovarella. La terra era infuſa e molle. Quanno* " *volevano caricare la valeſtria, mettevano pede nella ſtaffa. Lo pede* " *ſfuiva. Non pottevano ficcare lo pede in terra. Hoc eſt, paulo ante* " *modicus imber ceciderat. Humus ex infuſa aqua mollis ac lubrica* " *erat. Quum Genuenſes Baliſtas Sagittis oneraturi erant, pedem ſta-* " *phiæ immittebant. Pes, in quo ſtabant, elabebatur. Nequibant* " *pedem ſolo figere.* *Tom.* 2. *Diſſertation* 26, p. 18.

" and

Digitized by Google

" and fitted to their bows, to clap on in an inſtant(26). " And this I have heard of divers yeomen, who have " ſerved as ſoldiers archers in the field."

" I ſhall now, (continues Sir John Smith) pro- " ceed to the conſideration and examining, of *three* " moſt important things; in the which, all effects of " muſketéers, harquebuſſéers and archers, and their " weapons do conſiſt: and that is, whether muſke- " téers or harquebuſſéers with their weapons of fire, " or archers with their bows and ſheaves of arrows, " upon all occaſions in the field, be moſt ready with " all *dexterity* and *celerity*, to execute the effects of " their weapons; by diſcharging, and giving vollies " at their enemies. The *ſecond* is, whether the " archers with their weapons, or the other ſoldiers " with their weapons of fire, do fail *leaſt* to ſhoot, diſ- " charge and give their vollies. And the *third* is, " whether by reaſon and common experience, the bul- " lets of weapons of fire in the field, or the arrows of " archers do *annoy* the enemy moſt, be they horſemen " or footmen. To the *firſt*, I think, that there is no " man of any experience in the aforenamed weapons, " that will deny, but that archers are able to diſcharge " *four* or *five* arrows a piece, before the harquebuſſéers " ſhall be ready to diſcharge *one* bullet (27). Having " their bows bent, the archers have no more to do,

(26) From a paſſage in Aſcham, corroborated by an antique ring, found in the field where was fought the memorable battle of *Bannockburn*, (an engraving of which is given by Mr. Moſeley) it ſeems, that it was ſometimes the practice for an archer to have *two* ſtrings (one of them looſe) put on his bow *together*. *Moſeley*, p. 107.

(27) It muſt be recollected, that Sir John Smith ſpeaks of the ancient piece with a *match lock*; but ſee a note on this point *poſt* (*note* 66.); Sir John Smith alſo notices many other imperfections, to which that kind of fire-arm was liable, and which not being applicable in the compariſon of the bow with the *firelock*, are here omitted.

" but

Digitized by Google

" but to draw their arrows out of their caſes and " ſheafs, to notch them in their bows, to draw them " to the heads, and ſhoot; all which is performed in " almoſt in an inſtant. To the *ſecond*, I obſerve, that " neither hail, rain, or ſnow, (which impede the ef- " fects of fire-arms,) can prevent or hinder the archers " from ſhooting, and working great effects with their " arrows."(28)

As to very great celerity in firing muſkets, Sir John Smith entirely condemns it; obſerving, that in ſuch caſe, the muſketéers take no ſight, and only ſpend pow- der and heat their pieces (29). " As to the *third* " and laſt point, I think, (continues Sir John Smith) " it is ſuperfluous to reiterate and again ſet down " the different advantages and chief effects of harque- " buſſéers, muſketéers, and archers; becauſe I have " already made it ſo manifeſt; as alſo that the reader " hereafter ſhall ſee, in many parts of this diſcourſe, by " divers reaſons, and many notable examples and " experiences; that archers in the field do far exceed " and excel all muſketéers and harquebuſſéers; in ter- " rifying, wounding, and killing both horſes and men.

(28) Hail, rain, ſnow, and wind, will certainly take effect upon the arrow, and in *ſome degree* alter its range and force. With reſpect to the latter, Aſcham (in his *Toxophilus*) obſerves, " that " ſome kinds of winds, (as a ſide wind) try an archer and good " gere very much; and that once the down wynd *twelve ſcore* " *mark* (for the ſpace of three weeks) was *thirteen ſcore and an half*; " and into the wind (being not very great) a great deal above " *fourteen ſcore*:" meaning, that the wind was ſo ſtrong and briſk, that the arrow flying *with* the wind, greatly over-ſhot the mark. However, he is ſpeaking of light arrows, not war arrows, which were much heavier, and in their conſtruction better calculated to contend with the wind. We read indeed, of a battle in the eaſt, during an hurricane, which was ſo violent, as to render it diffi- cult to ſend an arrow from an Indian bow beyond a few paces. *Reign of Behauder Shaw, Aſiat. Reg. Characters*, p. 11.

(29) This is another reaſon in ſupport of Sir John Smith's *eighth* obſervation.

And

Digitized by Google

" And therefore will only in this place, anſwer one " objection, which I have divers times heard alledged, " in commendation of the effects of weapons of fire, " and to the diſabling of the effects of archers; and that " is, there are many that have reported, that the " blows of the bullets of muſkets and harquebuſſes " are no leſs than death, to ſuch as they light upon: " whereas contrarywiſe, the blows of arrows do but " only gall, or lightly wound: which in troth, is " greatly miſtaken, by all ſuch as do hold that " opinion. For that by common experience it hath " been ſeen, in all ſkirmiſhes and great encounters, " that for every one that hath been ſlain dead in the " field, by the ſhot of muſket or harquebuſs, there " have been *four*, that have *not* died by the hurts " of ſuch weapons of fire; although ſome of them " have remained ever after maimed, and ſome not. " Whereas by true experience, archers with their ar- " rows, do not only greatly wound, but alſo ſome- " times kill both horſes and men, in ſuch ſort as " they never depart out of the field alive, as it ſhall " hereafter appear by divers ancient, as alſo modern " examples. Beſides that I, and divers other gen- " tlemen of our nation, yet living, that were in " France in king Edward the Sixth's time, and alſo di- " vers times ſince, have many times heard French cap- " tains and gentlemen attribute all former victories of " the Engliſh againſt themſelves, and their anceſtors " the French, more to the effect of our *archers*, than " to any extraordinary *valliance* of our nation; and " therewithall further report and ſay, that they did " think, that the Engliſh archers did uſe to poiſon " their arrow-heads; becauſe, that of great numbers of " the French nation, that many times had been " wounded or hurt with arrows; very few had eſcaped

Digitized by Google

" with their lives; by reaſon that their wounds " did ſo impoſthume, that they could not be cured. " In which their conceits they did greatly err; be- " cauſe, in truth, thoſe impoſthumations proceeded of " nothing elſe but of the very *ruſt* of the arrow-heads, " that remained rankling within their wounds; and " therefore by the common experience of our ancient " enemies, (that we have ſo often vanquiſhed), not " only the great, but alſo the *ſmall* (30) wounds of our " arrows, have been always found to be more dange- " rous and hard to be cured, than the fire of any ſhot " unpoiſoned."

" Beſides all which, it is to be noted, that horſes in " the field being wounded, or but *ſlightly hurt* with *ar-* " *rows*, they (through the great pain that upon every " motion they do feel in their fleſh, veins, and ſinews, " by the ſhaking of the arrows with their barbed heads " hanging in them,) do preſently fall a yerking, fling- " ing and leaping as if they were mad: in ſuch ſort, as " be it in ſquadron, or in troop, they do diſorder one " another, and never leave until they have thrown (31)

" and

(30) Our arrow-heads uſed in war, were much ſmaller than thoſe uſed by moſt other nations. And Aſcham obſerves, that the *leſs* hole an arrow makes in the body, the more difficult it is to heal. The barb of the arrow-head may be made in ſuch a form, as often (when ſunk into the fleſh) to defy extraction, by the moſt ſkilful ſurgeon. The barbs uſed by ſome of the African nations are not ſtraight and parallel, as our ancient barbs were, but ſomewhat bent from the center, and turned different ways; on which account they are the more difficult to extract.

(31) Pyrrhus king of Epirus, in an engagement, had his horſe pierced with an arrow, which made the animal ſo furious, that he ran with his maſter into the very *midſt of his enemies*, and fell dead with him to the ground. (*Rollin*, vol. vii. p. 285.) At the battle of Agincourt, ſays Speed, " the horſes ſides were altogether *larded* " with arrows." *Hiſt. of Great Brit.* And Drayton moſt forcibly deſcribes the terrible effects, which the Engliſh barbed arrows had upon the horſes in that battle.

" Upon

Digitized by Google

" and caſt their maſters. Whereas contrarywiſe, horſes " that are in their vital parts hurt with *bullets*, or that " the bones of their legs, ſhoulders, or backs be bro- " ken; they do preſently fall down, or otherwiſe al- " though they be ſtricken clean through, or that the " bullets do ſtill remain in them, they, after the firſt " ſhrink at the entering of the bullet, do paſs their " *carriere*, as though they had very little or no hurt. " And this of the hurting of horſes with bullets, both " I myſelf, and all others do know, that have ſeen " any actions performed in the field. And the other, " of the great diſordering of horſes, with the hurts of " our Engliſh arrows; I have read in divers hiſtories, " and heard reported by divers gentlemen of our na- " tion, that have ſeen the ſame."

" Among many other fancies, which ſome of our

" Upon the horſes as in chaſe they fly,
" *Arrows* ſo thick in ſuch abundance light,
" That their broad buttocks men like *butts* might ſee,
" Whereat for *paſtime* bowmen ſhooting be."

And compares them to the ſting of an hornet:

" And in their flanks like cruel *hornets* hung."

Batt. of Agincourt.

Nor were they leſs terrible to *men*. " Certainly," ſays Mr. Barnes, (mentioning the ſea engagement before Sluys), " we are told by " moſt writers, that in this fight, the Engliſh arrows fell ſo thick " among the French, and did ſo ſting, torment, and fright them, " that many men, rather than endure them, leaped deſperately " into the ſea." *P.* 185. And Froiſſart (ſpeaking of the battle of Creſſy,) " ſays, whan the Genoways felt the arrowes perſyng through " heeds, armes, and breſtes; many of them caſt downe their croſs- " bowes, and dyd cutte their ſtrynges, and retourned diſcon- " fitted." *Chron.* vol. i. cc. 128, 129, &c. *Graſton Chron.* p. 274. Aſcham tells us, " the *feare* onlye of Engliſhe archers hath done " more wonderfull thinges, than ever I redde in any hiſtorye, " Greke or Latine, and moſt wonderfull of all now of late, beſyde " Carliſle, betwixt Eſke and Leven, at Sandyſikes: where the " whole nobilitye of Scotland, for fear of the archers of Englande, " (next the ſtroke of God) as both Engliſhe and Scottiſhe men " that were preſent hath told me, were drowned and taken pri- " ſoners." *Toxophilus.*

Digitized by Google

" captains of the Low Countries do alledge againſt " archers, (to the diſgracing and diſabling of them and " their weapons, in compariſon of their weapons of " fire,) one is, that the archers bows being by them " uſed againſt the enemy in the heat of ſummer, will " grow ſo weak, that thereby they will loſe their force " and effects. Whereunto I anſwer; that this objec- " tion is a new fancy, and a very dream, contrary to " all ancient and modern experience of Engliſh " archers: whoſe bows being made of that excellent " wood of *yew*, (32) do never ſo decay in ſtrength, " neither by hot nor wet weather, nor yet by often " ſhooting in them; but that they will with arrows " wound, and ſometimes kill both men and horſes a " greater diſtance off, than the ſhot and bullets of har- " quebuſſes and calivers, being employed and uſed in " the open field, by ſkilful conductors and leaders; by " reaſon of the wonderful failings and uncertainties of " thoſe, and all other weapons of fire maniable."(33)

Sir John Smith here notices two other objections againſt the bow; *firſt*, the impoſſibility (in foreign invaſions,) of finding the weapons and furniture of *archery* where it is not uſed; and *ſecondly*, that ſickneſs will diſable bowmen. To the firſt he anſwers, by aſking, if *muſkets* and their neceſſary appendages can be procured in an *enemy's* country, and obſerves,

(32) Bows made of *horn*, are greatly affected by the weather, particularly wet or moiſture; and often require to be ſet: that is, reſtored to their original ſhape and bending.

(33) Jaçoit que l'harquebuzier puiſſe tirer de plus loin, neatmoins l'archer & l'arbaleſtier *tuera auſſi bien* un homme nud de 100 *ou de* 200 *pas loin* que le meilleur harquebuzier: & telle fois que le harnois s'il n'eſt des plus fors n'y pourra reſiſter. Au plus le remede ſeroit, que ceux cy tiraſſent le plus pres qu' ils pourroint: & ſi cela ſe fait, l'on trouvera plus de gens bleſſez & tuez par *le traict*, que par le double d'harquebuziers. *Diſcipline militaire de Meſſire Guillaume du Bellay.*

that

Digitized by Google

that they are much heavier of carriage than bows and arrows; and that Edward III. and Henry V. had 9,000, or 10,000, archers in their armies, who did not want any article of archery. As to the *ſecond*, he inſiſts, that *ſickneſs* will diſable *muſketeers* as well as bowmen, and that the former muſt be ſtrong to uſe heavy pieces; whereas bows are much lighter (34). And he proceeds thus:

" Moreover they object againſt archers, that men " in this age are not ſo mighty and *ſtrong of body*, as " they have been in former ages; and therefore, cannot " ſhoot ſo ſtrong, and work ſo good effects with their " arrows, as their forefathers have done in times paſt. " But in England, and in all other nations, they may

(34) Sir John Smith ſays, a man may draw his bow, if he is ſound from the girdle upwards. However, it muſt be admitted, that between the fire-arm and the bow, there is this difference; that the latter depends for its effect upon a much greater degree of bodily ſtrength than the former. On this account, the battle of Agincourt wears the appearance of a miracle. One hiſtorian (Goodwin) tells us, that the Engliſh were almoſt famiſhed, having " (for ſome days before this battle) had nothing but nuts and " water to ſubſiſt upon." They were too attacked with a raging dyſentery. So that we are informed, " they were obliged to fight " naked from the waiſt downwards." *Peck's Hiſt. Stanford, quotes Acta Regia*, No. p. 134, 135. But it may be remarked, that although the proper management of a *ſtrong* bow requires much ſtrength of body, and particularly in the arms; yet is the action of uſing it, far leſs fatigueing than that of the muſket. In the exerciſe of the former, ſo many parts and muſcles are brought into *regular* and *united* action, that no one part is wearied by exceſs of exertion; and the bow in itſelf is of very light weight. On the contrary, the muſket (with the bayonet fixed) is very ponderous, and as in uſing it, it muſt reſt chiefly upon *one* arm; it ſoon cauſes fatigue in an hot action, when the vollies are given without intermiſſion. Whereas the bowman can ſhoot for many hours without being fatigued. Another diſadvantage on the part of the muſket may be here noticed; namely, that the effect of the powder is ſuch, that beſides involving the muſketteer in a cloud of ſmoke, it affects his eyes and aſſails his throat and ſtomach, circumſtances which muſt contribute to leſſen the effect of his diſcharges.

Digitized by Google

" ſee many ſons as tall, or taller; or bigger, and " ſtronger; as they ſhall ſee lower, ſlenderer, or weaker " than their fathers." (35)

" They alſo object, that the Engliſh have not for " thirty or forty years, had ſo much exerciſe in archery as " their forefathers uſed: whereby archers in number " are greatly decayed. This is true I confeſs; but it " is the fault of the magiſtrates in not putting the " laws in force: which their negligence or contempt, " whether it hath proceeded of that they have " been carried into the fancies of liking the aforeſaid " weapons of fire, becauſe they fill means ears and " eyes, with ſuch terrible fire, ſmoke, and noiſe: " or elſe, that they have been perſuaded thereunto, by " ſome old new-fangled men of war, that do neither " underſtand the true effects of muſketry, harquebuſſeery, " nor archery, I wot not."

" Our people and nation, of a ſingular gift of God, " and as it were by a natural inclination (36), with

(35) Speaking of the Engliſh in *general*, we may obſerve, that they are not ſo ſtrong as their anceſtors. The reaſons are obvious. Whilſt commerce was but little attended to, the ſports of the field filled up much of the time of the higher claſſes, and manual labour and recreations requiring ſtrength, that of the lower. As arts and manufactories increaſed, the occupation of great numbers became either ſedentary, or ſuch as deprived them of the opportunity of keeping up the vigour and ſtrength of the body, by exerciſe. Beſides, the increaſe of cities and towns, the conſequent impediment to the free circulation of air in them; with the unreſtrained uſe of ſpirituous and adulterated liquors, and habits of luxury; have contributed greatly to enervate the people of this iſland. Yet among the laborious poor, we ſhall ſtill find the ſtrength and power of body poſſeſſed by their anceſtors, (often the only patrimony deſcended to them) and which their occupations are admirably calculated to preſerve, and continue to their poſterity.

(36) " All Engliſhmen (ſays Aſcham) generally, be apt for " ſhooting. Children even from their cradle love it, and young " men, without any teaching, diligently uſe it." *Toxophilus.*

" good

Digitized by Google

" good execution of laws, came to be ſo perfect and
" excellent in the uſe of the long bow, without any
" public charge. Our enemies are more uſed to fire-
" weapons, and having many fortified places and con-
" ſtant garriſons to keep up, have always men trained
" to arms.

SECTION II.

Effects of Arrows more certain than thoſe of Bullets—Arrows terrify the Eye—Sir John Smith's *Challenge to the Muſket—Difference between the Range of an Arrow and a Bullet—Effects of both—Effect of Archery proved by Examples—Battles of Creſſy, Poictiers, Navaretta, Agincourt, and Herrings—Opinion that Archers cannot ſtand the Charge of Horſe, anſwered by Examples to the contrary.*

" ARCHERS, being good, direct their arrows
" with a great deal more certainty, being within
" eight, nine, ten, or eleven ſcores, than any muſ-
" ketéers or harquebuſſéers (how good ſoever they be)
" can do in a much nearer diſtance; by reaſon that
" muſketeers and harquebuſſéers failing in their *points and*
" *blank*, do neither kill nor hurt: beſides that in their
" *points and blank*, (through the great imperfections
" before declared), they do very ſeldom hit; whereas
" contrarywiſe, the arrows do not only wound, and
" ſometimes kill in their *points and blank*, but alſo in
" their deſcents and fall (37): for if in their deſcents,

(37) Stow (who copies from John Roſs) informs us, that at the battle of Haſtings, Duke William commanded his men, " that " ſome of them ſhould ſhoot directly forward, and other ſome " upward, by reaſon whereof, the arrows ſhot upward deſtroyed " the Engliſhmen as they ſtooped, and the arrows ſhot directly " aforehand, wounded them that ſtood upright." *Annalls*, p. 100.

Digitized by Google

" they light not upon the enemies faces; yet in their " lower deſcents, they light, either upon their breaſts, " bellies, thighs, knees, or legs; and in their loweſt de- " ſcent fall even to the very nailing of their feet to the " ground; which with the terrible coming of the arrows " in the eyes and ſight (38) both of horſemen and " footmen, cauſeth in them a wonderful fear and terror. " Whereas contrarywiſe, harquebuſſeers and muſketeers " with their weapons of fire, do no ways terrify neither " horſes nor men, that are but four or five times uſed " to their cracks, ſmoke, and noiſe; unleſs by great " chance, they happen to be ſtricken with bullets: and " the reaſon is this; that the bullets being diſcharged are " inviſible, and therefore do no ways terrify the ſight: " whereof it commeth to paſs, that when horſes and " men that have been in three or four ſkirmiſhes, do ſee " that they receive no hurt, neither by the fire, ſmoke, " nor noiſe; nor that in many thouſands of harquebuſs " and muſket ſhot, there are not twenty men ſlain, " nor hurt; they grow after to be far leſs in doubt of " thoſe weapons of fire, than of pikes, halbards, lances, " and ſwords. Howbeit, the vollies (39) of archers " arrows, flying together in the air, as thick as hail, " do not only terrify and amaze in moſt terrible ſort, " the ears, eyes, and hearts, both of horſes and men,

(38) " If it be true (ſays Sir John Hayward) as all men of " action do hold, that the *eye* in all battles is *firſt* overcome; then " againſt men equally accuſtomed to both, the *ſight* of the *arrow* " is more available to victory, than the *crack* of the piece." *Life of William by J: H.*

(39) It muſt not be ſuppoſed, that the archers delivered their arrows in a diſorderly or promiſcuous manner. On the contrary, their diſcipline ſeems to have kept pace with their proweſs. Froiſſart relates, that at the ever memorable battle of Creſſy, " the archers " of England ſhotte ſo *holly togyder*, that the Frenchmen were " fayne to give place to the Engliſhmen." *Froiſſart*, vol. i. c. 127. *Grafton Chron.* p. 270.

" with

Digitized by Google

" with the noiſe and ſight of their coming; but they " alſo in their deſcents, do not leave in a whole ſqua- " dron of horſemen, nor footmen (although they be in " *motion*) ſo much as one man unſtricken and not " wounded with divers arrows, if the number of the " archers be anſwerable to the number of the ſquadron " (40). And therefore for the experience that both I, " and many others, both noblemen, gentlemen and " great captains of many nations, that I have ſerved " amongſt, have had of the ſmall effect of weapons " of fire in the field, with the reaſons and differences " before alledged; for my part, I will never doubt to " adventure my life, or many lives (if I had them) " amongſt *eight thouſand archers* complete, well choſen, " and appointed, and therewithall provided and fur- " niſhed with great ſtore of ſheaves of arrows, as alſo " with a good overplus of bows and bow-ſtrings, " againſt *twenty thouſand* of the beſt *harquebeuſſeers* and " *muſketeers* that are in Chriſtendom."

" This I know, that harquebuſſeers, if led by ſkilful " conductors, are not to give any vollies, above *three* or " *four* ſcores at the furtheſt: nor muſketeers any vollies " of bullets, above *eight*, *ten*, or *twelve* ſcores, at any " ſquadrons of horſe or foot in motion. And yet that " *too far* (41), unleſs the leaders think rather to terrify

(40) Nead informs us, that Henry VIII. won Turwin, Tournay and Bullogn, chiefly by the uſe of the bow: which amazed the enemy, and *wounded* almoſt *every one*. *Double-armed Man*. Such was the effect of well directed vollies of arrows ſhot by the Engliſh, that beſides the ſlain, the number of the wounded, (who generally were made priſoners) was very conſiderable in almoſt all the great conteſts, in which they uſed the bow. Grafton, ſays that at the battle of Poictiers, " there were divers Engliſh archers that had " *four*, *five*, or *ſix* priſoners." *Chron.*

(41) The *point blank* range of a muſket ball is computed to be under 150 yards; *in action*, its effect can ſeldom be depended upon at more than two thirds of that diſtance. *See poſt (note 67.)*

" with

Digitized by Google

" with noiſe and ſmoke, than with any hurt of the bul-
" lets. Whereas, archers reduced into their convenient
" forms (42), being in ſo great numbers (as aforeſaid)
" do *dim the light of the Sun, darken the Air* (43), *and*

(42) " The ancient order of reducing archers into form, by our " moſt ſkilful and warlike anceſtors, was into *hearſes*; that is, " broad in front, and narrow in flank: as for example, if there " were 25, 30, 35, or more or fewer archers in front; the flanks " did conſiſt but of 7 or 8 ranks at the moſt. And the reaſon " was this, that if they had placed any more ranks than 7 or 8, " the hinder ranks would have loſt a great deal of ground, in " the vollies of their arrows, at their enemies; conſidering the " convenient and proportionate diſtances between rank and " rank, and ranks before them; as alſo, that the ſight of the " hinder ranks would have been taken away, by ſo many former " ranks, from directing their vollies of arrows towards their " enemies faces. Our anceſtors placed the hearſes of archers, " either before the front of their armed footmen, or elſe in wings " upon the corners of their battalions, and ſometimes both in " front and wings." *Sir John Smith.*

" At the battle of Creſſy the archers ſtood in the form of an " hearſe, about 200 in front, and but 40 in depth: which is " undoubtedly the beſt way of embatteling archers, eſpecially " when the enemy is very numerous, as at this time. For " by the breadth of the front, the extenſion of the enemies front " is matched; by reaſon of the thinneſs in flank, the arrows do " more execution, being more likely to reach home." *(Barnes, p. 356.)*

After the introduction of fire arms, the archers were placed behind the Harquebuſſeers, with great effect; as we read was practiſed at the battle of Pinkey, between the Engliſh and Scotch, on the banks of the Eſke. *Vide poſt, chap. 4.*

(43) This expreſſion of Sir John Smith's, reſpecting the appearance of arrows, is by no means hyperbolical. Hiſtorians of all ages, have made ſimilar obſervations upon their flight. Our old chroniclers frequently compare the vollies of arrows, at the battles of Creſſy, Poictiers and Agincourt, to the fall of *hail* and *ſnow*, and to *motes* in the Sun. Our poets follow them. Drayton (in his *Poly-Olbion*), ſpeaking of the civil conteſts, writes,

" The winters *ſleet* or *hail* was never ſeen ſo thick,
" As on the houſes ſides the bearded *arrows* ſtick.
" The middle fight (which was the army's only pride)
" Of archers moſt approved————
" Stood ſtoutly to the ſhock, and flang out ſuch a flight
" Of ſhafts, *as well near ſeem'd t'eclipſe the welcome light.*
" And with the ſhot came *ſhafts, like ſtormy ſhow'rs of Hail.*"

Song 22.

" *cover*

Digitized by Google

" *cover the Earth* with their vollies of arrows, *eight*,
" *nine*, *ten* and *eleven*, ſcores diſtant from them (44);
" in ſuch ſort, as no numbers of muſketeers or har-
" quebuſſeers or argoletéers (45), nor yet ſquadrons of
" lances, nor of footmen (being ſo ill armed as in theſe
" days they are), ſhall be found able to abide the incredi-
" ble terror of the ſhot of ſuch infinite number of arrows.
" For there is no doubt, but that archers with their
" vollies of arrows, will wound, kill, or hurt above
" *one hundred* men and horſes, for every *one* that ſhall
" ſhall be ſlain or hurt, by the vollies of ſo great
" numbers of *harquebuſſeérs* or *muſketéers*, as before
" mentioned (46)."

" Now whereas our ſuch men of war, do further
" diſable our archers, ſaying, that they are to work in a
" manner no effect, neither againſt horſemen nor foot-
" men; and that archers are not able to abide the
" terror of the ſhot of muſketéers nor harquebuſſeers,

(44) It ſeems that *twelve ſcore yards* was, in general, the full *extent* of the flight of the *heavier* kind of *ſheaf* or war arrows, which were very long and proportionably heavy. Each ſheaf conſiſted of twenty four, " of which (Sir John Smith ſays,) eight were lower " feathered, ſmaller and ſlighter arrows than the reſt." *Anſwer to Mr. Barwick.* The uſe of which was, " to gaul or aſtonne the " enemies with the haile ſhot of light arrows, before they ſhall " come within the danger of the harquebuſs ſhot." *Art of War, Harleian MSS.* 4828.

(45) The *harquebuſs* was a lighter ſort of muſket, and was uſed without a reſt. The *argolette* ſeems to have been the ſame or very like it, and gave the name of *argoleteer* to the *horſe ſoldiers* who uſed this latter fire-arm.

(46) Reſpecting the great inefficiency attending the firing of musketry in modern war; Mr. Maſon obſerves, that Marſhal Count Saxe, in his Memoirs, ſtates, that on a computation of balls uſed in a day's action, not one of upwards of *eighty five* took place. Mr. Maſon has collected ſeveral modern inſtances of the effect of muſketry, from which it appears, that Marſhal Saxe's computation may (under the preſent ſyſtem of military tactics) fairly be *doubled*. *Maſon on the Long-Bow and Pike.*

" with

Digitized by Google

" with many other vain and fond objections, contrary " to all reaſon and experience: it is not to be marvelled " at, that they do ſo groſsly err in their fond opinions " conceived and alledged, againſt the excellent effects of " that weapon, of which they never had any experi- " ence, nor yet do know how to order them. For " archers, reduced into their forms, were placed by our " anceſtors in the *face* of the *men at arms* (47) of " *France*, and all other brave horſemen of foreign " nations, who in thoſe days were far better armed, " than any nations in theſe our days are. And yet " with this good order, the wonderful effect of our " archery and arrows was ſuch; that flying in the air as " thick as ſnow, with a terrible noiſe, much *like a* " *tempeſtuous wind preceding a tempeſt*; they did leave no " diſarmed place of horſe or man unſtricken and not " wounded. As may well appear by many battles and " victories, and namely, by the battle of *Creſſy*, that " King Edward III. and Prince Edward his ſon won " againſt King Philip of *France*; where the ſaid King " Philip had *eight or ten thouſand men at arms*, and " *fifteen thouſand Genoeſe croſs-bow men*, (which were no " ways inferior for ſervices in the field to the muſkets " of this time (48): with ſo puiſſant an army alſo on " horſeback

(47) The *men at arms* (ſometimes called by Froiſſart *Gens d'armes*, at other times *lances*, from the ſpears, or lances they often carried) fought both on horſeback and on foot. At times, they were habited in body-armour of iron, and plates of iron on their arms: the joints were defended with mail, which was worn under the whole armour (therefore often called by hiſtorians a *ſhirt* of mail). At other times they were ſtill cloſer armed, with the joints of the armour defended by plates of iron. *Strutt. vol. 3. p. 33.*

(48) The *croſs-bow* was the intended rival of the long-bow; but we find, from unqueſtionable authorities, that the *croſs-bow-men* could never ſtand againſt the Engliſh long-bow men. In the ſea engagements before Sluys, and with the Spaniſh armada near Winchelſea, in the reign of Edward III. Barnes, (p. 182. 451.) tells

Digitized by Google

" horſeback and on foot, very well armed and ap-
" pointed (of divers nations), that they were *fix* at the
" leaſt for every one of the Engliſh: in which battle
" were ſlain *eleven Princes*, and *twelve hundred knights*,
" beſides *thirty thouſand ſoldiers* of all nations. And
" the wonderful effect and terror of ſhot of arrows was
" that day ſuch, as neither the French King with his
" men at arms, nor any other of his great captains, with
" their brave and well armed bands of horſemen of
" divers nations, were able to enter and break the
" archers: although they had no pikes, *ſtakes* (49),
" banks,

tells us, " that the *Engliſh arrows* did more execution *by far* than the " croſs-bows;" and that in the latter engagement, " the archers " of England pierced their arbaliſters with a *further* reach than " they could ſtrike again." Yet Wood (in his *Bow-man's Glory*) tells us " that ſome croſs-bows ſhot *twenty ſcore* yards." However, the care taken in this kingdom, by the legiſlature, to reſtrain the uſe of the croſs-bow (which ſeems to have been favoured as an inſtrument of amuſement in England in the reigns of Henry VII. and Henry VIII.) and to encourage the practice of the *long-bow*, ſufficiently marks the preference given to the *latter*, as a *weapon of war*. *See* Stat. 19 H. 7. c. 4. 6 Hen. 8. c. 13. and ſubſequent ſtatutes. Hollinſhed (who wrote in the ſixteenth century) laments the decay of our ſtrong archery, obſerving, " that Certes, the " Frenchman and Rutters, deriding our new archery in reſpect to " their corſelets, will not let in open ſkirmiſh (if any leiſure ſerve) " to turn up their tails and cry *ſhoote Engliſhmen*; and all becauſe " our ſtrong ſhooting is decayed and laid in bed: but if ſome of " our Engliſhmen now lived, that ſerved King Edward III. the " breech of ſuch a varlet ſhould have been nailed to his bum, " with one arrow; and another feathered in his bowells, before " he ſhould have turned about to ſee who ſhot the firſt." *Deſcription of Britain, Book* 2. *Chap.* 12. Among the plates engraved in *Strutt's Horda Angel-cynnan (vol.* 2. *pl.* 46.) is one repreſenting an engagement between the Engliſh and French in Flanders, in the reign of Henry IV. in which a rank of Engliſh *long-bow-men* appears oppoſed to one of *croſs-bow-men:* and one of the *latter* is repreſented, as having ſtepped a little forward and turned up his *bare-breech;* in which an arrow from an Engliſh long-bow appears to be *firmly fixed.* Theſe authorities, concurring in ſuch particulars, probably record, or refer to a well known fact.

(49) Our archers, to guard and protect themſelves from the attack of the horſe, uſed to place before them ſtakes five or ſix feet long

Digitized by Google

" banks, nor trenches to guard them; but being in the " plain and open fields, the archers with their vollies of " arrows, did break both horſemen and footmen; " wounding and killing, both horſes and men, in ſuch

long pointed with iron. *(Grafton chron. p. 455.)* Paulus Jovius gives us a complete view of the arms and manœuvres of a body of Engliſh archers, in the following words: " Apud Anglos in " ſagittis unica ſpes, et præcipua gloria crebis victoriarum proven- " tibus, parta. Eas minimo digito craſſiores, bicubitaleſque, & " hamato præfixas ferro; ingentibus ligneis arcubus intorquent, " tanta vi, arteque, ut ad primos præſertim ictus ſquamoſam " thoracem, aut loricam facilè penetrent, fervefactamque geſtatu " & multo ſole; ferream Equeſtrem armaturam ſæpe transfodiant. " His è Romana diſciplina, mos eſt vallum geſtare, et dimenſo " ſpatio protinus, ubi hoſtis fuerit in conſpectu, in orbem ſe " munire. Palos enim teretes utrinque ferrea cuſpide præacutos, " mira celeritate ſolo defigunt, & infeſta acie, paululum procli- " natos in hoſtem vertunt: in medio autem ferreus eſt annulus, " quo perpetua ſæpe reſte vinciuntur. Circumvallati in hunc " modum, levo pede in ima parte palum premunt, & divaricatis " cruribus, panſiſque lacertis, ſagittas excutiunt. Interna autem " ſiniſtri brachii oſſea tabella conteguntur, ne manicæ rugis " recurrentis, nervi impetus elidatur: eo quod diximus, muni- " tionis, genere Gallici equitatus impetium, *quo nihil acrius, atque* " *vehementius olim fuit*, egregie ſuſtinuerunt; quam alii temerè " illatis ſe præacutis vallis inderent; alii vel in poſtrema acie " ſagittarum grandine ſternerentur. Hac una prælii ratione Joan- " nes Galliæ Rex apud Pictavos ingenti prælio victus, captuſque " eſt: et Philippus ad Sammorabrinam accepta magna clade, pro- " ſligatus. Apparuitque ea in pugna, ſagittarios Ligures, qui " Scorpionibus arcuſerreis uterentur, quo teli genere atque animis " hoſtibus pares videri poſſent; necque *vi*, necque *celeritate Anglis* " fuiſſe *comparandos*." *Deſcriptio Britanniæ. fo.* 16. Speed gives us the following account of the uſe made of theſe ſtakes, by the archers at the battle of Agincourt. " The firſt troop of French " horſe were exquiſitely appointed; whereon the riders much " preſumed, and meant to have burſt through the archers, with a " violent courſe; but they giving back, left their ſharpe pointed " ſtakes ſticking, which till then were unſeen. The French, ſup- " poſing the archers had fled, came on with their horſe upon the " ſpur, and that in ſuch heat, as the earth ſeemed to tremble under " their thundering feet; and being forced forward without fore- " ſight of danger, carried their proud riders into the jaws of " deſtruction: for falling by troops upon thoſe goring ſtakes, they " were miſerably overthrown and paunched to death." *Hiſt. of Great Brit. p.* 628.

" ſort

Digitized by Google

" ſort, that the French King himſelf, being in great
" peril, had his horſe with the ſhot of arrows ſlain
" under him. By which example, and divers others,
" that I will hereafter alledge; it may be apparent to
" any man that is poſſeſſed with the grace of God,
" and therefore of ſound judgment, that archers being
" in great numbers, and reduced into the form of
" *hearſes* or *double hearſes*, as wings to a battalion or
" ſquadron of pikes (that they may the more conveni-
" ently give their vollies of arrows,) need not be guarded
" with pikes, nor yet ſtakes (as ſome talk of the bat-
" tle of Agincourt,) but they themſelves are moſt
" brave pikemen: for as a ſquadron of pikes well
" formed, do with their pikes in their hands work great
" effect in reſiſting a charge of lances, or by encounter-
" ing with another ſquadron of pikemen their enemies;
" ſo the arrows of brave archers reduced into hearſes,
" being delivered out of their bows, do become ſo
" terrible pikes in the eyes and ſight of the horſes, as
" alſo in lighting upon their ſhafrons, cranets or ſteel
" pectorells, or being not barbed, upon their bare faces
" and every diſarmed part; that the horſes with the
" huzzing, ſtriking, and unaccuſtomed noiſe, and with
" the blows and wounding of the arrows, do fly back
" and athwart the one the other: in ſuch ſort, as no
" force of ſpurs can make them go any further againſt
" the archers, but that they do diſorder and overthrow
" one another. Beſides that againſt ſquadrons of
" armed footmen, the vollies of arrows flying in the
" air, and coming in their eyes and ſights as thick as
" hail; and lighting upon their faces, and every other
" diſarmed part; do ſo amaze them, that they come to
" loſe their ranks and diſorder themſelves, before they
" can come to join with another ſquadron of armed
" men their enemies: and alſo with their terror do
" wonderfully

Digitized by Google

" wonderfully confuſe and confound the greateſt and
" braveſt captains, in their directions and command-
" ments. As it may very well appear, not only by
" the battle of Creſſy before mentioned, but alſo by
" the battle of *Poictiers:* where, certain years after, the
" ſame Prince Edward, (that was at the battle of Creſſy
" with King Edward his Father,) having not in his
" whole army above *eight thouſand Engliſh*, and *Gaſ-*
" *coigns* (of the which there were ſix thouſand *archers*,
" and two thouſand armed men;) overthrew King
" John of France, (that valiant Prince,) who at that
" battle was accompanied with a great part of the
" nobility of France and of other nations, as Dukes,
" Princes, Earls, and other great captains; and had in
" his army above *three ſcore thouſand* horſemen and
" footmen; of the which there were above ten thou-
" ſand men at arms; and of horſemen of all ſorts above
" thirty thouſand: where, a little before the battle, the
" Prince with his notable captains, conſidering the
" ſmall number that he had to make head and reſiſt
" the French King with ſo huge an hoſt, did take a
" ground of ſome ſtrength and advantage, for the
" guard of the flanks and back of his ſmall army. And
" placing a great part of his archers in front, in the
" open place where the French horſemen and footmen
" were to enter and give battle: the archers with their
" wonderful vollies of arrows (through the great good-
" neſs of God) did that day ſo wound, kill and miſ-
" chief both horſes and men; that he overthrew King
" John of France with his whole army, and took him
" and one of his ſons priſoners; and of Earls, Barons,
" Knights, and Eſquires, to the number of ſixteen hun-
" dred or more: beſides that there were ſlain the Duke
" of Athens, with ſo many Earls, Barons, Knights and
" Eſquires; that they were numbered to be above ſeven
" hundred

Digitized by Google

" hundred, and ſo many priſoners of all ſorts taken " by the Engliſh and Gaſcoigns, that they far exceeded " the number of the *Prince's army.*"

" The battle alſo of *Navarretta* in Spain, fought by " the ſame Prince Edward (in favour of Don Pedro el " Cruel, againſt Don Henry of Caſtile,) may teſtify the " wonderful effect of archers, where there were above " an *hundred thouſand* Spaniards, Frenchmen, Portu- " gueſe, Genoeſe croſs-bow men, and Moors, both " horſemen and footmen, overthrown in that battle."

" The famous battle and victory of *Agincourt*, alſo " of later years fought by King Henry V. againſt the " whole power of France, doth evidently ſhew the " moſt excellent effects and execution of archers, where " with the grace of God and incredible vollies of ar- " rows, the French King's army was overthrown, which " conſiſted of above *forty thouſand horſemen and footmen:* " of the which there were ten thouſand men at arms, " all knights, eſquires and gentlemen; whereas King " Henry's army did conſiſt of but *ten thouſand archers,* " *fifteen hundred lances, and two thouſand footmen* of " other weapons. In which battle were ſlain, the " Dukes of Lorain, of Brabant, of Alençon, and Bar, " with a great number of eſquires; beſides that, there " were taken priſoners, the Dukes of Orleans and " Bourbon, with many other earls, barons and knights."

" The battle of *Herrings* alſo (ſo called by the " French chronicles) fought in King Henry VI's time " (near unto a village in France called Rouveray, not " far from Orleans) doth evidently ſhew the great " excellence of archery, againſt all other ſorts of " weapons; in which battle Sir John Falſtaff, with " other brave Engliſh captains, by the grace of God " and terrible ſhot of the archers, overthrew the baſtard " of Orleans, the Lord High Conſtable of Scotland, the

Digitized by Google

" Count of Clermount, with many other captains of " great account, and their whole army of Frenchmen " and Scots; in the which there were a great number " of French *harquebuſſéers* and *croſs-bow-men*, which " againſt the archers wrought *no effect*."

" But I omit the particulars of many other *great* " victories, that I could alledge for proof of the incre- " dible effects of our archers in battles (50): and will now " come to anſwer certain other frivolous objections, of

(50) Not only large, but even very *inconſiderable* bodies of archers, have done great ſervice in the field. *Leland* in his *Collectanea* (vol. 1. p. 569 to 572) has mentioned ſeveral feats performed by a few Engliſh archers in France in the time of Edward III. And Aſcham notices an action performed by Sir William Walgrave and Sir George Somerſet with only *ſixteen* archers, near Hammes, " where (to uſe Aſcham's words) they turned with ſo few " archers, ſo many Frenchmen to flight, and turned ſo many out " of their jackes (coats of mail) which turne turned all France to " ſhame and reproach; and thoſe two noble knights to perpetual " praiſe and fame." *Toxoph.* See alſo *Sir John Smith's Diſcourſe on Weapons*; and *Barnes's Hiſt. of Edward III.* The latter writer among others, notices an action which, in its effect, may well be ranked among the *wonders* of *archery*. This was the battle fought near Mauron, between Rennes and Plomerel, (15th Aug. 1352) between the Engliſh and French; the former (who were only 300 men at arms and 600 archers) were led by Sir Walter Bentley and Sir Robert Knowles. The army of the French and Bretons, (being four times as great as that of the Engliſh) was under the conduct of Lord Guy de Neſle marſhal of France, and other great officers; and was ſo ordered by the marſhal, that having a ſteep mountain behind at the back, the French and Bretons might be enforced to ſtand to it reſolutely, by deſpairing to fly. This array was ſo dreadful, that it diſmayed the hearts of ſeveral Engliſhmen, and they began to fly, and thirty of the archers actually deſerted. But by the courage, good conduct and reſolution of Sir Walter Bentley, the Engliſh (after a doubtful and bloody fight,) obtained a famous victory. Among the ſlain on the ſide of the French, were the marſhal himſelf, *thirteen lords*, *one hundred and forty knights*, *five hundred batchelors*, (whoſe coats of armour were brought away:) but the common ſoldiers were not numbered. And the Engliſh took priſoners (of *lords*, *knights and batchelors*) to the number of *one hundred and thirty*. *p.* 463. *See alſo Hollinſhed's Chron. Reign of Hen.* VI.

ſmaller

Digitized by Google

" ſmaller moment than theſe that I have already, by " ſuch notable examples and experiences of great bat- " tles and victories, anſwered."

" Some of our ſuch men of war, (becauſe by com- " mon and modern experience, no number of muſke- " teers nor harquebuſſeers in the plain fields, without " ſuccours of ſome other weapon or ground of advan- " tage, are able to abide the charge of half ſo many " lances or *ſtradiots* (51) in number as they are, with- " out being overthrown and broken,) do therefore " think and commonly report, that with a very ſmall " number of horſemen, they will break a far greater " number of archers; by which their opinions and " reports, it ſeemeth, that as they are utterly ignorant, " and without any experience of the effects of archers, " ſo are they as ignorant of all notable hiſtories; or elſe " according to the new faſhion, they do believe nothing " but that which they themſelves have ſeen, which in " troth appeareth to be very little."

" For anſwer whereunto, (according to the teſtimony of " the French chronicles) I ſay, that in King Henry VI's " time, John Lord of Bellay, being accompanied with " two hundred lances at the leaſt, met by chance with " an Engliſh captain, called Berry, that had to the num- " ber of *four ſcore* archers; who perceiving the French- " men, preſently reduced his men into an *hearſe*, turn- " ing their backs to an hedge, (that the lances might " only charge them in front; and ſo giving their vol- " lies of arrows at the French lances *charging*, did ſo " wound and kill their horſes, that they overthrew " them, and ſlew and took divers of them priſoners."

(51) *Stradiots* were French light horſemen, with ſhort ſtirrups, beaver hats, ſmall ſpears, and ſwords like the ſcimiters of Turkey. *Grafton's Chron. p.* 980.

Digitized by Google

" And within a while after, a French captain (Guion " de Coing) accompanied by *ſix ſcore* lances, went out " to ſeek an adventure with the Engliſh; and was met " by Sir William Olde, with *ſixteen* or *twenty* archers " on horſeback (52); who diſmounted, and formed in a " broad way, where lances could not charge them, but " in *front*; and the French lances charging them, the " vollies of arrows of thoſe few archers, wrought ſuch " notable effect againſt the French horſemen, that they " broke and overthrew them; in ſuch ſort, that there " were divers of the French ſlain and taken priſoners. " And in our time, King Henry VIII. being at the " ſiege of Teroüenne, a convoy of proviſions was com- " ing from Guines towards Teroüenne: all the French " captains of Picardy and Vermandois having intelli- " gence of it, aſſembled all the men at arms, harque- " buſſéers and croſs-bow-men, laid in ambuſh, and " overthrew the Engliſh light horſe avan-couriers; " which being perceived by the Engliſh, they ſo placed " their *archers*, that after a long fight, and many " charges by the French men at arms and their ſhot " given, (the French far exceeding the Engliſh in " number) the French, having a number of horſes

(52) The bow was not confined to the *foot* ſoldier. The Engliſh had in their armies a number of *mounted* bow-men, (called *Hoblers*) who were found to be very ſerviceable. (*See Moſeley*, p. 262.) Barnes (ſpeaking of the actions of theſe archers) ſays " Thoſe that went out into the field, to range themſelves in order " were warmly received by the archers on horſeback, who rode " about ſcouring the field, and wherever they eſpied any extraor- " dinary concourſe of men gathering together, thither they rode " up, and diſſolved them by their thick flights of arrows. P. 311."

Sir John Smith (in his *compariſon of weapons*,) draws a compariſon between the effects of *horſe-musketeers* and *horſe-archers*, and decides in favour of the latter.

" wounded

Digitized by Google

" wounded and ſlain, were completely repulſed and " overthrown by the *excellence* of the *archers* (53).

(53) On the effect of arrows againſt the horſe, may be added the two following inſtances. " At the battle of Durham or Nevils-" croſs (anno 1346) Sir David Graham, a valiant baron, with a " wing of *five hundred* horſe, well appointed, gave a full charge " upon the left flank of the Engliſh archers; but was received " with ſuch a ſhower of arrows, that after two or three attempts " in vain, having loſt many of his men, he was fain to fly back " to the main battle, upon the ſpur, in great danger of being " taken by his purſuers. *Barnes*, p. 379.

" About Bartholomewtide laſt (1595) came out of Scotland, " one James Ferguſon, bowyer to the King; who credibly re-" ported, that about two years paſt, rebels did riſe there againſt " the King, who ſent 500 horſemen well appointed. They meet-" ing 300 rebells, bowmen,—The bowmen ſlew *two hundred and* " *four-ſcore of the horſes, and killed, wounded, and ſore hurt moſt part* " *of the King's men.*" *Treatiſe to prove the Uſe of Archery*, 1596. Paulus Jovius has given us a very lively deſcription of a rapid charge made by a body of French horſe, upon the Engliſh archers, " than which (ſays he) there was nothing more ſevere and impe-" tuous;" yet he adds, that the latter ſuſtained it with a wonder-ful firmneſs; continuing to pour down upon them a ſtorm of arrows. *(Vide ante note 49.)*

Digitized by Google

SECTION III.

Particular Effects of Arrows againſt Fire-Arms, proved by Examples—Ket's *Rebellion*—*Rebellion in the Weſt*—*Battle at* Newhaven—*Superiority of Engliſh Bows and Archery, compared with the Bows and Archery of other Nations.*

" NOW if the effect of vollies of arrows be ſo " terrible, both againſt horſemen and footmen " *armed* (54); (as I have before declared, by ſo many " reaſons and examples,) what then are the vollies of " arrows

(54) In anſwer to thoſe, who aſſerted that an arrow would not penetrate through ſingle buff jerkins, or ſcarcely through ordinary clothes, Sir John Smith obſerves, that although the French formerly were well defended by body armour, yet did they not truſt to that alone; but carried *pavoiſes* (ſhields plated with ſteel, ſeven feet long and about two feet broad) to protect themſelves from the Engliſh arrows. We may therefore without difficulty imagine, that had they not found by experience, that armour was not proof againſt the Engliſh arrow, they would never in battle, have encumbered themſelves with large and heavy ſhields. But upon this ſubject Patritius (before quoted) diſputing the violence of arrows, makes a ſingular remark, doubting not to affirm " that " *an Engliſh arrow, with a little wax put upon the point of the head, will* " *paſs through any ordinary corſelette or cuiraſs.*" *Parlal. milit.* 1594. Lib. 3. fo. 37. It ſeems needleſs to accumulate authorities upon a matter, in which all hiſtorians concur; but the two following examples (among many others) may perhaps tend to put Sir John Smith's obſervation beyond diſpute. Lord Lyttelton tells us, " that Henry II. during his expedition into Wales, was wounded " by a random arrow; and if his habergeon, or coat of mail, had " not been ſtronger than uſual, the wound would have proved " mortal, but the ſkill of his armourer ſaved him." *Vol.* 2. *p.* 57. We may ſuppoſe, that the King's armour was made of the beſt materials, and well calculated to preſerve the life of ſo royal a perſon;

Digitized by Google

" arrows able to perform, againſt muſketéers and har-
" quebuſſéers, that are in a manner *diſarmed*; whoſe
" weapons of fire in the field do rather terrify and
" make afraid younglings and novices of war, with
" ſmoke and noiſe, than with any often killing, hurt-
" ing, or wounding them with bullets: whereof not
" only old ſoldiers, but horſes alſo that are a little uſed
" to their fire, cracks and ſmoke, are not any thing
" amazed, nor afraid. But three or four vollies of
" arrows, lighting amongſt any number of muſketéers
" or harquebuſſéers (how old and brave ſoldiers ſoever
" they be) will ſo amaze and terrify them, that they
" ſhall fail to charge their pieces, to put touch powder
" into their pans and their matches into their ſerpen-
" tines (55). Beſides, that they will either wound,

perſon; probably it was ſimilar to that worn by his father, on receiving the honor of knighthood, which (ſays Lord Lyttelton) " was an incomparable habergeon, compoſed of *double plates or* " *ſcollops of ſteel*, which no arrow or lance could penetrate." *Vol. 2. p.* 157. We are told, that the panoply worn by Earl Douglas at the battle of Homildon, was of remarkable temper. *Pinkerton's Hiſt. of Scotland.* Speed ſays, that not only *his* armour, but that of his *men at arms* had been *three years* in making, yet he adds, " the Engliſh arrows rent it with *little adoe*;" and Douglas himſelf received five wounds. *Annals*, p. 328. Sir John Smith obſerves, that metal targets were made of two tempers, the ſoft to reſiſt muſket ſhot, and the *hard* to reſiſt the lance, and *tempered heads of arrows. Anſwer to Mr. Barwick*, MSS. And Lord Lyttelton (ſpeaking of the armour of the twelfth century) adds " we find, " that the armour of the knights in thoſe days, was not always " proof againſt *arrows* from Welch or Engliſh bows." *Vol. 2. p.* 160. As to the effect of arrows upon *wood*, Edward VI. informs us, that one day an hundred archers of his guard, ſhot before him two arrows each at an *inch* board of *ſeaſoned* timber; and that ſome of the arrows pierced quite through it, and others not only went quite through this board, but fixed in another board behind it; the diſtance is not noticed. MSS. *Diary of King Edward VI. Brit. Muſ. (Bib. Cott. Nero. C.* 10. *P.* 55.) *page* 39.

(55) Although Sir John Smith is ſpeaking of the *match lock*, yet the obſervation is applicable to the *fire-lock*.

Digitized by Google

" kill, or miſchief them, in ſuch ſort, as happy thoſe, " that with three or four arrows in their bodies, faces, " arms or legs, throwing down their harquebuſſes and " muſkets, can eſcape out of the terror and danger of " the vollies of arrows (56). For confirmation whereof, " there be divers modern examples, with very honour- " able teſtimony of ſuch as are yet living; very hon- " ourable, by birth and parentage, as alſo by titles " of honor and worthineſs; of which that noble gentle- " man Ambroſe Earl of Warwick is one, that accom-

(56) On this head, Clement Edmonds furniſhes us with the following juſt remarks. " The diſorder or routing of an enemy which " is cauſed by the bowmen, cometh from the fearful ſpectacle of a " drift of arrows; for a ſhower of arrows well delivered and well " ſeconded, for a while, is ſo *terrible* to the *eye*, and ſo *dreadful* in " *ſucceſs*; that it is almoſt impoſſible to keep the enemy from " routing. Of ſuch bullets as do hit, the greater part do not " ſtrike death, but are oftentimes carried until the ſkirmiſh be " ended, before the party feels himſelf hurt. But a ſleeve of " archers is available againſt an enemy, as well in ſuch arrows as " do *not* hit, as in ſuch as do hit: for whereas the cloud of " arrows is ſubject to our ſight, and every arrow is both ſuſpected " and able to bring death ſitting on the head, an enemy is " as much troubled at ſuch arrows as come fair upon him and " do *not* hit, as thoſe that do hit; for no man is willing to expoſe " his fleſh to an open and imminent danger, when it lieth in his " power to avoid it: and therefore whilſt every man ſeeketh to " avoid hurt, they fall into ſuch confuſion, as beſides the loſs of " particular men, the enemy doth hardly eſcape diſorder, which " is the greateſt diſadvantage that can befal him; moreover, " the arrows having barbed heads, although they make but a " light hurt, yet they are not eaſily pulled out, which maketh " the ſoldiers not mind the fight, until they be delivered of them. " And the horſe ſo fling and chafe, that it is impoſſible they " ſhould either keep their rank, or be otherwiſe managed for any " ſervice." And he concludes by obſerving, " that the uſe of " the bow was too much neglected by the Engliſh of his time, (he " wrote about the cloſe of the ſeventeenth century) conſidering " the honor they had achieved by it in former ages." *Lib.* 7. *ch.* 15. *p.* 137. Mr. Groſe writes to the ſame purport; and adds, that archers can act in the rear of a battalion of infantry, and even of a ſquadron of *cavalry*. *Hiſt. of the Engliſh Army.* vol. 1. p. 148. *note.*

" panied

Digitized by Google

" panied the Duke of Northumberland his father,
" (then Earl of Warwick) a man of great valour and
" ſufficiency for the governing and conducting an
" army: who in the year 1548, was ſent by King
" Edward VI. as his lieutenant general, with an
" army of horſemen and footmen, to ſuppreſs the re-
" bellion of Ket, in Norfolk; who at that time lay en-
" camped with a great power of notorious and hardy re-
" bels by the city of Norwich, upon a high hill called
" Mount Surrey. To the which city, the duke with his
" army being come, he with great order did encamp and
" lodge himſelf and his army on the other ſide of the
" city and river. And the next day he entered the town
" and brought four and twenty field pieces, to the
" chief charge whereof he appointed colonel Courpenick
" an *Alman* and a great ſoldier, with his regiment of
" *Almans*, which was twelve hundred, the moſt of
" them brave ſhot, and all old ſoldiers; with divers
" Engliſh bands and valiant captains of our own
" nation, for the guard of the ſame: but before they
" could thoroughly entrench themſelves, thoſe furious
" rebels, (contrary to all expectation,) deſcended down
" their hill with ſuch fury of ſhot of *arrows*, (being all
" bowmen, ſwords and bills,) that they gave ſuch a
" terror and fear to our people, both ſtrangers and
" Engliſh, as they were fain to run away, with the
" loſs of ordnance, and ſlaughter of a great ſort of
" ſoldiers: and before the Duke could make head
" againſt them, they had recovered eighteen field-
" pieces; and carried them up to their hill, even with
" very force of men. And within two or three days
" after, thoſe gallants did not let to abide the battle
" againſt the Duke and his whole army, in the plain
" field; where the battle was ſo manfully fought on
" both ſides, that it could be hardly judged (by the

" beſt

Digitized by Google

" beſt ſoldiers that were there,) which ſide was likely to " prevail: but in the end, (God giving the victory,) it " was ſeen by that battle, that arrows were a moſt noble " weapon. And whereas the Duke, who at his firſt " aſſembling and forming his army, changed many " archers into harquebuſſéers (becauſe he had no " opinion of the long-bow) he, after the victory and " ſuppreſſion of the rebels, upon the experience that " he in thoſe actions had of the *danger* and *terror* of " *arrows* (his own horſe being wounded under him at " that battle with three or four arrows, whereof he " died) did both then, and many times after, openly " proteſt his error before Count Malateſta Baglion, (an " ancient and noble ſoldier, *Italian*,) and other great " captains Italians and Almans; ſaying, that from that " time forward, he would hold the *bow* to be the *only* " *weapon of the world*; and ſo did all the notable cap- " tains, both Engliſh and ſtrangers, affirm the ſame. " And this I have ſet down almoſt *verbatim*, from the " report of the aforeſaid Ambroſe Earl of Warwick, " who was preſent at that action, and had his horſe " wounded under him with two or three arrows (57).

" In the ſame year of the reign of King Edward VI. " and the ſame ſummer, Sir John Ruſſel, Kt. (Lord " privy ſeal, that was after Earl of Bedford,) being " ſent by the King as his lieutenant general, with a " great power both of horſemen and footmen, againſt " the rebels of the *weſt* parts; accompanied with Lord " Grey of Wilton, Sir William Herbert (after Earl of

(57) Speaking of this action, Sir John Hayward obſerves, " that the rebels firſt put forth their archers, then their horſe- " men, then a tumultuous multitude without judgment or direc- " tion: and that the Italians were well ordered and diſciplined." *Life of K. Ed. VI. p.* 67.

" Pembroke,

Digitized by Google

" Pembroke, the Lord of Hunſdon (that now is,) with " many others, both Knights and Eſquires of great " worſhip; and coming to certain ſkirmiſhes and en- " counters with the rebels: the archers of the rebels, " did ſo behave themſelves with their vollies of arrows, " againſt divers old bands, harquebuſſéers, Italians, " and Spaniards; that they drove them from all their " ſtrengths, as from banks, ditches, hedges, and other " advantages of ground, to the great miſchief of many " of thoſe ſtrangers. And of theſe great effects of " archers againſt harquebuſſéers, I have heard the " Lord Chamberlain aforeſaid (who was there an eye " witneſs) very notably report. Beſides that, many " years paſt, I have heard Captain Spinola, an Italian, " (who was a very brave ſoldier, and wounded with " arrows in thoſe ſervices and actions,) give ſingular " commendation of the archery of England.

" To the like effect and ſingular commendation of " archers, I have alſo heard the aforeſaid Earl of " Warwick divers times further report, that in the " year 1562, being at Newhaven in Normandy; the " notable and great Chaſtillon, admiral of France, being " at the ſiege of Caen, ſent to the earl for ſuccour of " ſome Engliſh bands; which he deſired might be " moſtly *archers*. But the earl having none with him, " ſent ſix hundred brave harquebuſſéers with ſome armed " men alſo, which he very thankfully received: but " therewithall ſignified unto the earl, that he had rather " have had *two hundred archers*; and that he would have " performed *greater* ſervice with that ſmall number of " *bows*, than with all thoſe brave harquebuſſéers.

" And ſhortly after, the notable colonel Alman, " the Reingrave, who had ſerved many years in " France, accompanied with many other brave captains, " both French and Almans, with a great power both

" of

Digitized by Google

" of horſemen and footmen; coming down and en-
" camping not far from Newhaven: there happened
" a great ſkirmiſh between certain Engliſh bands of
" Newhaven, and the French and Alman companies,
" which continued very hot, with many vollies of
" harquebuſs ſhot, and new ſupplies on every ſide.
" But at length, the French and Almans, exceeding the
" Engliſh far in multitude, forced them to retire with
" diſorder, even to the gates of Newhaven. During
" which action, it happened, that *four-ſcore* tall archers
" (Hampſhire men) did at that time land in the Haven;
" who, taking their bows and ſheafs of arrows with
" their other furniture, did preſently march without any
" tarryance through the town into the field, where the
" ſkirmiſh was; upon whoſe coming, the Engliſh
" bands (that a little before were forced by the often
" charges and great multitude of the ſhot of their
" enemies, to retire even to the very town ditches
" and gates); taking courage afreſh, they and the
" bowmen entered again into ſkirmiſh with the Almans
" and French; where the *four-ſcore archers* did behave
" themſelves ſo notably againſt the enemies, with their
" vollies of arrows; that with the brave and valiant
" charges which they and the reſt of the Engliſh
" bands gave upon their enemies, (but chiefly with
" the *excellence of the archers)* they forced them not
" only to retire, but to turn their backs; in ſuch ſort,
" as putting a great number to the ſword, they became
" maſters of the field. Upon which notable effect of
" thoſe few archers, as alſo upon divers others, that the
" Reingrave had before time ſeen in ſerving againſt the
" Engliſh, he ſhortly after, upon the return of a meſſage,
" ſent by the Earl of Warwick (Sir Edward Horſey
" being the meſſenger), did moſt highly commend
" the notable effects, that he long before, in divers ſer-
" vices,

Digitized by Google

" vices, had ſeen performed by Engliſh *archers*, both " againſt horſe and foot: and ſaid alſo, that long " before that time, he knew by experience, that great " numbers of Engliſh archers were able to perform *very* " *great matters* in the field; but that ſo ſmall a number " of bowmen, as were in that laſt great conflict, ſhould " be able, with their arrows, to do ſo great miſchief " againſt his old bands of Almans, French and Gaſ- " coignes, he would not have believed, if he himſelf had " not ſeen it. And therefore did with great reaſon and " experience proteſt and acknowledge, the long bows " of England, to be the moſt excellent weapons for " the field, that were uſed by any nation in Chriſten- " dom: and ſaid, that the Queen of England had " great cauſe ſo to eſteem and account of them. And " to this effect, I have divers times heard the Earl of " Warwick himſelf very notably report."

Sir John Smith then refers to Sir James Croft, (who he obſerves, had ſerved under ſeveral of our kings and commanders in many great military ſtations), and who reports ſimilar effects of the Engliſh archers. He calls to mind, the known effects of the Gothian, Parthian, Arabian, Turkiſh and Tartarian bows; which people he obſerves had more archers than other troops in their armies; that the Goths, Vandals, and Alans conquered more with the effect of their bows, than of any other weapons (58): and that ſome nations, (as the Perſians, Parthians, Medes, and Turks) did even in his time, prefer the bow to fire-arms. " And it is " evident (ſays he) by hiſtories which have mentioned

(58) Pliny ſays, " ſi quis Æthiopas, Ægyptum, Arabas, Indos, " Scythas, Bactros, Sarmatarum tot gentes & orientis, omniaque " Parthorum regna diligentius computet, æqua fere pars hominum " in toto mundo *calamis* ſuperata degit." *Plin.* lib. 16. c. 36.

" bows,

Digitized by Google

" bows, and by ſuch as have travelled into many " parts of Europe, Africa, or Aſia: that our Engliſh " bows, arrows, and archers, do exceed and excel all " other bows, uſed by all foreign nations; not only in " ſubſtance and ſtrength, but alſo in the length and ſize " of the arrows"(59). However he concludes his diſcourſe, by expreſſing the little hope he had of convincing men, who were ſo ſelf-willed, that they would give no credit to *hiſtory*, *experience*, or *example*.

(59) Whatever may be the ſuperior ſkill of Engliſh bowmen, and the ſuperior effect of their bows; yet Sir John Smith is not quite correct, in reporting, that the Engliſh arrow was *longer* than that in uſe among *other* nations. Many tribes in Aſia, Africa, and America, uſe wooden bows and arrows, *as long* and ſometimes *longer*, than Engliſh bows and arrows. Aſcham notices (among others) the bows of the *Ethiopians*, the length of which were *four cubits*: and the arrows of the *Indians*, which were from a yard to a *yard and a half in length*. *Toxoph.* The arrows uſed at this day, with the Tartar horn bows, are probably, what Aſcham alludes to, which are about that length. Alexander the Great, was wounded (in a battle with the *Oxydracæ*) with an arrow, *three feet long*. *Rollin*, vol. vi. p. 375. See alſo *Moſeley*, p. 67. As to the comparative effects of the Engliſh and other bows; Patritius ſays, " the won- " ders done by the Parthian bows, are not to be compared to the " *Engliſh* bows for *ſtrength* or *ſhooting*." *Paral. Milit.*

CHAP-

Digitized by Google

CHAPTER III.

SECTION I.

Authorities in ſupport of Sir John Smith's Obſervations—Diſuſe of the Bow, as a Weapon of War, in England.

IN the ſame year in which Sir John Smith's diſcourſe upon weapons was made public, appeared a ſhort tract, written by Sir Robert Williams; which Mr. Barwick obſerves, was to the ſame purpoſe; only, that the latter writer gives ſuperiority to the bow over all fire-arms, with the *exception* of the *muſket*. Sir John Smith is ſupported in his opinion, (upon the want of policy of the Engliſh, in relinquiſhing the uſe of the long-bow,) by Aſcham, Sir John Hayward, Patritius (who although he gives fire-arms the firſt place, by no means aſſents to the *diſuſe* of the bow,) Clement Edmonds, and other writers. But as Sir John Smith had predicted, the advocates for the muſket at length prevailed; and we find, that notwithſtanding this his able attempt to ſupport the character, and continue the uſe of that *noble weapon*, as he aptly terms the bow; (with which, the Engliſh had as the preamble to the *ſtatute* of the 33 H. 8. c. 9. expreſſes, " *not only defended this realm, and the ſubjects thereof, againſt the cruel malice and danger of their outward enemies in time*

Digitized by Google

" *time heretofore paſt; but alſo with little number and* " *puiſſance in regard had done many notable acts and diſ-* " *comfitures of war, againſt the infidels, and other; and* " *furthermore ſubdued and reduced divers and many re-* " *gions and countries to their due obedience; to the great* " *honor, fame, and ſurety of this realm and ſubjects, and* " *to the terrible dread and fear of all ſtrange nations,* " *any thing to attempt or do to the hurt or damage of* " *them or any of them:")* Archery, (which the *ſtatutes* of the 13 Eliz. c. 14. declares, " *not only hath* " *ever been, but alſo is God's ſpecial gift to the Engliſh* " *nation, a ſingular defence of this realm, and an occa-* " *ſion of many noble victories*)," yielded to the opinion of the times, and at length the *long bow* ceaſed to be employed in this nation, as a weapon of war." (60)

SECTION

(60) Mr. Moſeley has obſerved; " that the battle of Agin-" court, (which happened 1415, under Henry V.) is the *laſt im-* " *portant action*, in which *archery* is much ſpoken of; and that, " although the uſe of it was continued through ſeveral ſucceed-" ing reigns; yet it at length, ſeemed to have been cultivated more " as an *amuſement*, than for real military ſervice (p. 228)." But on this head, Mr. Moſeley is, moſt unqueſtionably, incorrect: for we find the Engliſh *long-bow* to have been, not only the chief weapon of conqueſt; and a cauſe of the great ſlaughter, during the civil wars between the Houſes of York and Lancaſter, (particularly at the bloody battle of Towton): but that in the reigns of Henry VI. Henry VII. Henry VIII. and Edward VI. it continued to ſupport its military character, and invincible career of glory, with undiminiſhed effect: as the memorable battles of Floddon and Pinkey, (the latter is particularly noticed by Sir John Hayward (*poſt ſec.* 2.) and the campaigns in France and Flanders, during thoſe reigns, will teſtify. In the reigns of Edward VI. and Elizabeth, we find its value in military ſervice, highly ſpoken of by foreigners of high rank and great military ſkill, who had witneſſed its powerful effects. (*Sir John Smith's Diſcourſe on Weapons*, ante, ch. ii. ſec. 3). In a letter from Queen Elizabeth, to the Sheriffs of Lancaſhire, is an order to levy men for the Iriſh ſervice; and the proportion of bows to calivers, is one half. And it appears (by Queen Elizabeth's annual expence, civil and military, anno 1578), that *fifty bowmen* were on board each

Digitized by Google

SECTION II.

Compariſon between the Bow and improved Fire-arms—Former Diſadvantage of the Bow—Advantage of the Bullet over the Arrow—Peculiar Advantage of the latter—Queſtion, whether the Muſket or the Bow can diſcharge the faſteſt, conſidered—General Obſervations.

NOTWITHSTANDING the very powerful arguments made uſe of by Sir John Smith, for the continuance of military archery, and to prove the ſuperior effect of the bow in war, over all other weapons: we cannot but ſuppoſe, that had he lived in theſe times, and been a witneſs to the degree of perfection

each of the firſt rate men of war, and that the inferior rates alſo had a due proportion of archers. (*Peck's Deſiderata Curioſa*, vol. i. lib. 2. p. 72). And Sir John Smith informs us, that a conſiderable part of the army drawn out at Tilbury (to oppoſe the Spaniſh invaſion, anno 1588,) conſiſted of bows. *Diſcourſe on Weapons.* Pére Daniel ſays, arrows were ſhot by the Engliſh, at the ſiege of the Iſle of Rhé in 1627. In 1643, the Earl of Eſſex iſſued a precept, "for ſtirring up well affected people by benevolence, "towards raiſing a company of archers, for the ſervice of the "king (Charles I.) and the parliament." And in a Pamphlet, (noticed by Mr. Groſe) printed anno 1664, giving an account of the ſucceſs of the Marquis of Montroſe againſt the Scotch; *bowmen* are repeatedly mentioned: which is the lateſt period to which any account of Engliſh military archery can be traced. *Groſe on ancient Armour and Weapons. Moſeley*, p. 231. For an account of the commiſſions iſſued for the revival of the uſe of the long bow; *ſee Stow's Survey of London*, vol. ii. b. 5. ch. 13. *Moſeley* and *Hargrove.*

Digitized by Google

to which fire-arms (61) have been brought; and the eaſe and celerity with which they are now uſed; he would have entertained a much higher opinion of their effects, and valued them accordingly (62). It is true, that very little execution (comparatively ſpeaking) is performed even by the moſt improved fire-locks, owing (as Sir John Smith juſtly obſerves) to the difficulty of taking a ſure ſight, the celerity uſed in loading and firing in action, and other circumſtances. And it muſt be remembered that the bow had, in former times, to contend with fire-arms, which, though ſlower in their diſcharges, were *ſurer* in their *aim*; being conſiderably heavier than thoſe now uſed, and having the great advantage of a reſt, to correct the vacillation of the arm (63). On the other hand, the bow is ſubject to ſeveral inconveniences, not altogether ſo referrible to fire arms. It is liable to be completely diſabled by the ſtroke of a bullet; being elevated for diſtant ſhots much above the head of the archer; and his aim is impeded and rendered ſomewhat uncertain, by the

(61) Mention of *cannon* and other great guns, has been omitted in this treatiſe; which offers a compariſon between bows and *ſmall arms* only. The ſuperior and decided effect of *ordnance* (particularly of late years), where it can be brought into action with effect, needs no comment.

(62) Sir John Smith (to prevent his opinion of fire-arms being miſconſtrued) candidly obſerves, "that every weapon has its due "time and place, and that fire-arms, although a moſt *uſeful* wea-"pon, are yet often found *out of their place*, and conſequently then "of no value." *Anſwer to Mr. Barwick. Harl. MSS.*

(63) The author of theſe Tracts finds his ſuggeſtion upon this point, confirmed by authority. The author of the *Introduction to a plan of Diſcipline for the Norfolk Militia*; (ſpeaking of the *match-lock*), obſerves, "However, moſt writers allow, and ſome old officers "that we have known, who remembered match-locks being ſtill "in uſe, have confirmed it: that they were very *ſure*, and leſs "apt to *miſs fire* than the fire-lock;" but adds, that he thinks the latter ſcarcely credible, as the old locks were not ſo well made as they are now. P. 7. note 3.

dazzling

Digitized by Google

dazzling light of the ſun when in his front (64): while the muſketeer (from the horizontal line of his level) avoids this latter inconvenience. Beſides, the bullet has the decided advantage of the arrow, in *three* very important particulars; namely, *velocity*, *force*, and *point-blank range*. By means of the firſt, it reaches its object (ſuppoſing it to be diſtant one hundred yards) in leſs than the fourth part of a ſecond of time, while an arrow (from one of the ſtrongeſt bows) does not move that ſpace in leſs than three ſeconds. As to force, the arrow beyond two hundred and fifty or two hundred and eighty yards at the furtheſt, does not poſſeſs a force equal to what a bullet retains at that diſtance. But the chief advantage of the muſket lies in the *extent* of its *point-blank* range, which is calculated to be about one hundred and twenty yards; whereas the ſtrongeſt bow cannot command a *point-blank* range much exceeding fifty yards: conſequently, the latter muſt (beyond that diſtance) depend for its effect, upon the ſkill and judgment of the archer; and it is well known by experience, that in ſhooting at objects, diſtant about one hundred and eighty or two hundred yards and upwards, the eye is frequently deceived; and that, not only miſts, but the loſs of the ſun in the evening, and indeed the abſence of it (by the intervention of a paſſing cloud at noon day), will cauſe this deception in a degree; ſo that the arrow ſhall often either exceed, or (which moſt frequently happens under ſuch circumſtances), fall ſhort

(64) The archers in all encounters avoided, as much as poſſible, fighting with the ſun in their faces. See the engagement before Sluys. *Froiſſart's Chron.* vol. i. c. 50. Battle of Creſſy. *Froiſſart's Chron.* vol. i. cc. 128, &c. *Hollinſhed's Chron.* 1587, vol. ii. p. 358. *Barnes's Hiſt. Edward III.* p. 182.

Digitized by Google

of its deſtination (65). Again, the arrow poſſeſſes an advantage, (which the bullet can ſcarcely, if ever be made to command in any efficient degree, in the line of its flight); ranging with conſiderable certainty, in a curve, from an almoſt perpendicular to nearly an horizontal elevation; and taking effect, as Sir John Smith obſerves, "from the top of a man's *head*, even to the "nailing of his *feet*;" and from the firſt to the laſt rank in the army; while the bullet, once paſſing over its object, loſes itſelf in an uſeleſs flight. However, the difficulty of hitting the mark with an arrow at a great diſtance, is much leſſened in war, by the object to be ſtruck, conſiſting of ſeveral extenſive columns or lines of men; and it appears by recorded facts, that our ancient archers *very ſeldom* miſſed ſuch marks: ſo much is all manual art, (and particularly the art of archery), under the influence of early habit and frequent practice. Beſides, as Mr. Maſon has juſtly obſerved, the archer has the advantage of the muſketeer, in being able to notice the *flight* and *fall* of his arrow, and conſequently to amend his diſcharge.

Whether it is poſſible for a muſketeer, of this day,

(65) A remarkable inſtance, in which a true knowledge of diſtance became important, occurred at the great battle of Towton, between the Yorkiſts and Lancaſtrians, in the Reign of Edward IV. At the time the battle began, a thick ſnow fell, and was driven by a briſk wind full in the faces of the Lancaſtrians, who were thereby prevented from obſerving the exact diſtance of the enemy. The Lord Fauconberg, an old and experienced officer, made an admirable uſe of this accident; he ordered his men to advance as near as they conveniently could, to diſcharge a flight of arrows, and then retire with all ſpeed out the reach of thoſe of the enemy. This ſtratagem had a wonderful effect; for the Lancaſtrians feeling the arrows, and thinking their enemies were not many yards diſtant, emptied their quivers with unavailing diſcharges. *Speed. Hiſtory of Great Britain.*

to

Digitized by Google

to ſhoot *faſter* (66) than an archer, will ſcarcely be contended. Certainly the muſketeer, in attempting this emulation, would heat and foul his piece in ſuch a manner, as to leſſen its effect very conſiderably: and the hurry of ſuch impetuous diſcharges, would not only diſtract his aim, and conſequently cauſe great deviation in his ſhot, but alſo would ſoon diſable him with fatigue. When charged with the bayonet, the muſketeer would, perhaps, have ſome advantage over the bowman, by being able to retain his ſhot the longeſt; as the latter would be under the neceſſity of relinquiſhing his bow, time enough for him to take up his pike; unleſs he could retire through the rank behind him: but the near approach of the enemy might, probably, render this manœuvre impracticable, without cauſing a fatal confuſion in the other ranks. Againſt the *horſe*, the bow, with the aſſiſtance of the pike, ſeems capable of being uſed with the greateſt effect, as Mr. Maſon has evidently pointed out. Yet, when acting againſt the *foot*, ſo long as the archers could maintain their ground, and give their diſcharges with firmneſs; it is difficult to conceive, how the beſt diſciplined troops (within the reach of their vollies of arrows) could load their fire arms, during an inceſſant ſtorm of arrows, aſſailing every part; and falling with ſuch force, as even to beat their weapons out of their hands; which was the caſe

(66) An archer of this day has been known to ſhoot *twelve* arrows, at forty-ſix yards diſtance, into the circumference of *two feet*, within the ſpace of *one minute*. An expert muſketeer, cannot (we may preſume) diſcharge above half as many bullets in that time, at the ſame diſtance, with any *certainty of effect*. The beſt Pruſſian muſketeers (whoſe pieces prime themſelves) are ſaid to diſcharge ſix bullets in a minute; but ſuch rapidity of diſcharge is too fatiguing to be continued. So ſimple is the exerciſe of the *bow*, that in the diſcharge of the arrow, only two diſtinct movements are neceſſary; viz. 1ſt, the drawing the arrow from the belt and placing it in the ſtring. 2d, the drawing the bow, and looſing the arrow.

Digitized by Google

at the battle of Homildon (in the reign of Henry IV. and called by ſome *Hallidown*) where Speed tells us, " the Lord Percy's archers making a retreat, did " withall deliver their deadly arrows (*tam vividè, tam* " *animosè, tam gravitèr*, ſaith our monk) ſo lively, ſo " courageouſly, ſo grievouſly; that they *ran through the* " *men at arms, bored the helmets, pierced their very ſwords,* " *beat their lances to the earth*, and eaſily ſhot thoſe " who were more ſlightly armed through and through." Similar effects of Engliſh archery were noticed at the battle between the Engliſh and Scotch, on the banks of the Eſke, near Muſſelburgh (called the battle of Pinkey), in the year 1547, when, ſays Sir John Hayward, " the Engliſh archers ſent ſuch ſhowers of ſhot " over the Hackbutter's heads, that many bodies " of their enemies, being but half armed, were *beaten* " *down* and *buried* therewith." *Life and reign of King Edward VI.* p. 33. And it muſt be obſerved, that the archers would poſſeſs the advantage of being clear of the noiſe and ſmoke, with which their adverſaries would be aſſailed, and which in ſome degree contribute to render the execution of muſketry ſo uncertain, and conſequently, would be at liberty to make rapid movements, and to give their diſcharges with greater regularity, certainty and effect (67).

(67) It has been already obſerved, that the *point-blank* range of a muſket ſhot is about 120 yards; but that *in action* it cannot be much depended upon beyond *one hundred*. Beyond 80 toiſes, or 160 yards, the fire of a line of infantry can *ſeldom* have effect. (*Guibert.* vol. i. p. 157). See *Inſtructions for the Drill, (as ordered for his Majeſty's Forces,) by John Ruſſell, Brevet Captain, and Paymaſter, and late Adjutant in the Weſt London Militia*, 2d edit. 1799. And we have ſeen by calculation (grounded upon facts) what is the preſent general *execution* of muſketry, in pretty cloſe actions. (*Ante, note* 46). It muſt be admitted, that at 100 yards diſtance, the ſheaf or *war* arrow, caſt from a *war*-bow, would ſtrike its object with a force nearly, if not quite, equal to that of a muſket ball; and that its ſtrong

Digitized by Google

ſtrong ſteel-pointed head would, in ſome reſpects, give it the advantage of the leaden bullet. Experiments have been lately made, to aſcertain the claim for *certainty* of ſhot, between the muſket and the bow. In order to accompliſh this deſign, one of the beſt muſkets was procured, and loaded with the greateſt nicety; the powder uſed was of the very beſt quality, and the quantity was previouſly weighed, and proportioned with the utmoſt exactneſs, to the weight of the ball, which was confined with muſlin or fine rag, inſtead of paper; and in ſhort, every precaution was taken to afford the muſket its true and full effect. The victory was to be decided in twenty-one ſhots, at a target diſtant 100 yards: and the reſult of the trial was, that the muſket put *eleven* and the bow *fifteen* (out of twenty-one) ſhots into the target. The experiment was repeated once or twice, but the bow continued the ſucceſsful weapon. However, this trial could not ſhew the advantage of the *bow* over the muſket, in its fulleſt point of view; for had an *army* been ſhot at, inſtead of a target, every arrow which went wide of, or *over* the mark, would have taken place; while the bullet, having paſſed over the heads of the firſt rank, would probably paſs over the heads of the other ranks. Againſt an enemy protected by a hill, wall, or other defence in front (above the height of a man); whilſt the muſket is uſeleſs, the bow can act with conſiderable effect. It may be found very ſerviceable in diſcharging arrows loaded with fire, againſt combuſtible matters. See *Moſeley*, p. 175 to 182. Mr. Moſeley quotes from Voltaire's Hiſtory of Charles XII. King of Sweden, an account of the brave ſtand which Charles (with a few attendants in a ſtone-built houſe) made againſt the whole Turkiſh and Tartar army; and which the former would have repulſed, had not the Turks ſhot arrows loaded with fire into the roof, windows, and doors of that fortreſs. *Fire arrows* were formerly uſed by the Engliſh. *Ibid.* In the Britiſh Muſeum Library (*Tit. Milit. Tracts*) is a pamphlet, (printed in the year 1628, and entitled, "*A new Invention of ſhooting Fire-ſhafts in Long Bows*)" wherein the author not only ſets forth the uſe, but alſo gives particular directions for the conſtruction of fire-arrows. "Their chief ſervice (he obſerves) "is in moleſting and putting in hazard the cannoniers; firing "the enemies tents; making a blaze for the muſketeers to fire; "keeping workmen by night in awe; facilitating attempts by "night; dazzling the eye of the enemy, and expoſing him; and "firing the ſails of ſhips: moſt of which ſervices may be per-"formed from *behind* a breaſt of defence, (this indeed, is an ad-"vantage appertaining to archery in general); and in routing the "horſe." The effect of a barbed arrow-head charged with *fire*, and *adhering* to horſe or man, may be eaſily conceived.

Digitized by Google

SECTION III.

Observations on the possibility of increasing the Powers and Effects of the Bow—Causes of the Improvements in Fire-arms—Value and Importance of lately imported Bow-woods—Improvement in the Construction of the Bow.

HAVING thus stated impartially, the claim for pre-eminence in military service, between the bow and fire-arms; the advocate for the latter cannot deny me the indulgence of making this last remark on the part of the bow; namely, that had the practice of military archery continued, it would have attracted the attention of the philosophers, and the mechanics of the times, to the present day: and that the realm (which so much depended upon the effect of archery) would have held out great encouragement to men of genius, to exert their abilities in improving the bow and arrow; and, no doubt, such attention and encouragement would have led to the discovery of greater powers and effects, than that weapon has hitherto displayed; or at least, would have greatly improved those which we acknowledge it to possess. For we are sensible of the rapid progress of all arts and sciences, and of the wonderful perfection to which they have been carried in the course of the two last centuries; by means of the advancement of letters, and the investigations and experiments of philosophers and men of genius in all countries; and of that liberal communication of useful discoveries and inventions, which has

Digitized by Google

has long characteriſed Europe. To theſe cauſes, (as well as to the rewards ſecured by the laws of this country to ingenuity) fire-arms owe their preſent powers. And although the bow and arrow have during all that important period, lain by unnoticed; yet have they (however accidentally) profited by the knowledge and implements of modern mechanics; who conſtruct them with greater nicety, than what our anceſtors were uſed to do. The revival of archery has introduced to the attention of the bow-maker, ſeveral ſorts of foreign wood, (but lately imported into this country), which upon trial, have been found to make bows that rival, and in ſome particulars even excel, thoſe of the long famed *yew*: And the *arrow woods* now in uſe, are deemed far ſuperior to what were employed in archery in former times. But the new method of conſtructing the bow with a *back*, which (as it not only renders it on ſome accounts, more acceptable as an inſtrument of amuſement; but alſo increaſes its powers, by giving additional velocity to the arrow) may be found very uſeful in its *military* purpoſe, was not practiſed till ſome time after archery had quitted the field.(68)

(68) Admitting the great powers of the bow, and its value as a weapon of war, even at this day; yet it muſt be confeſſed to be a moſt *ſanguinary* one. A gun-ſhot wound in a part not vital (even if the ball cannot be extracted), ſeldom proves fatal: the wound, after a time, cloſing over the ball; and but occaſionally cauſing a degree of uneaſineſs, or pain. But a wound with a *barbed* arrow, *not extracted*, muſt ever be attended with pain, and conſiderable *danger*. Hiſtorians frequently mention the torment endured by thoſe, who have been wounded by arrows: and Sir John Smith has ſufficiently proclaimed the terrors of the Engliſh *barb*; and noticed the inflammation and fatal effect, occaſioned by the ruſt of the arrow-head. Touching the galling of the enemy, (ſays Clem. Edmonds), "there cannot be a better deſcription than that which Plutarch (*Plut. Craſſus*) maketh of "the overthrow of the Romans, by the Parthian arrows. The "Roman ſoldiers hands (ſaith he) were nailed to their targets, "and

Digitized by Google

" and their feet to the ground, or otherwiſe were ſore wounded in " their bodies, and died of a cruel lingering death, crying out for " the anguiſh and pain they felt; and turning and tormenting " themſelves upon the ground, they break the arrows ſticking in " them. Again, ſtriving by force to pluck out the barbed heads, " that had pierced far into their bodies through their veins and " ſinews, they opened the wounds wider, and ſo caſt themſelves " away." *Lib.* 7, ch. 15. The arrow has been, and if again uſed, may again become an inſtrument of torture, at which humanity ſhudders. An inſtance, (pleading imperious neceſſity indeed) occurred at the battle of Creſſy, and is noticed by Stow in his *Annals:* ſpeaking of that battle he relates, " that the Engliſh " Marſhals and the Earls of Warwick, Saliſbury, and Suffolk, " with their wearied battailes, joined the prince; having firſt " ſupplied the exhauſted quivers of their archers with arrows " *drawn from the bodies of their dead and dying enemies.*" P. 262. *Barnes*, p. 508. Such was the effect of arrows in war, that Sir John Smith tells us, " valleys ran with *brooks of blood*, cauſed by " the ſlaughter of the Turkiſh *arrows.*" *Anſwer to Mr. Barwick. Harl. MSS.* And Mr. Gibbon ſays, " that the firſt body of the " Cruſaders was overwhelmed by the Turkiſh *arrows*; and a " *pyramid* of *bones* informed their companions of the place of their " defeat." *Ch.* 58.

PART

Digitized by Google

PART II.

AN ACCOUNT OF THE REVIVAL OF ARCHERY, AS AN AMUSEMENT, IN ENGLAND: IN WHICH THE VALUE OF IT AS AN EXERCISE, CAPABLE NOT ONLY OF AFFORDING MUCH PLEASURE AND SATISFACTION, BUT ALSO OF RESTORING HEALTH, AND ADDING VIGOUR TO THE NERVES, AND STRENGTH TO THE BODY, IS CONSIDERED.

Digitized by Google

Digitized by Google

CHAPTER I.

SECTION I.

Archery always an Amuſement in England—till of late, confined chiefly to the North—Reviſal of Archery in the South—Cauſe—Value of the Art as an Exerciſe—Authorities—Archery particularly recommended to young Perſons—Not denied to old Age—Effect of Archery in relieving the Mind.

NOTWITHSTANDING the fate of *military* archery, the bow long kept its poſt in this kingdom, as an agreeable amuſement, and a polite recreation of much value. Yet, even as an amuſement, (till within theſe laſt few years) it has, for a century paſt, been little known. The archers diviſion of the *Artillery Company* in the ſouth; and one or two ſocieties in *Lancaſhire* and *Cheſhire*, (counties once famed in hiſtory for their powerful bowmen (1), and in which archery has never

(1) "*Lancaſheere* faire *archere*." *Leland's Collectan.*
"From *Lancaſhire*, men famous for their bows."
Drayt. Barons Wars, b. i. f. 42.
Speaking of *Cheſhire*, Drayton ſays,
Who with (their bills and *bows*) may confidently boaſt
Our Leopards they ſo long and bravely did advance,
Above the *fleur-de-lis*, even in the heart of France.
Drayt. Poly Olbion. Song 11.

been

Digitized by Google

been entirely diſuſed); and the *royal company of archers* in *Scotland* (2), have been for many years the ſole, (and at times the very feeble) ſupport of the art in Great Britain. Thus is it with the bow; an inſtrument, which from the earlieſt period of time, has been, in almoſt all parts of the earth, the all conquering weapon; an inſtrument, by means of which the Norman conquered England; and the Engliſh not only ſubjected and ſecured Wales, Scotland, and Ireland; but did *ten ſeveral times ſucceſsfully invade France*; *once brought it to the brink of ruin*; *once conquered it*; *made one of its Monarchs priſoner, and another tributary* (*Maſon*); and with which, they performed ſuch exploits wherever they went, as, proverbially, to become the beſt allies, or the worſt foes. So that, but for the amuſement which the bow ſtill affords to a few; archery (in this kingdom) would be for ever loſt and forgotten. And when that fails, this weapon, which once every Engliſhman had at *hand* (3), will (if even a remnant of it is found) be deemed a curious relick, worthy the acceptance of an antiquarian. But ſo miſerable an exit to ſo noble, and once famed a weapon, need not be dreaded, while it receives the ſupport it has met with for the laſt twenty years; interrupted in ſome degree only, by a long and unprecedented war, and the continued threat of invaſion, which have compelled all men to fly to the arms of the day.

The late revival of archery (which although it took place in the *ſouth* gave new vigour to its ſupporters in the

(2) See a full account of the *Royal Company of Archers in Scotland*, in *Hargrove's Anecdot.* p. 68, and *Moſeley* 228, and *Appendix*, p. 342.

(3) By an act of parliament paſſed in the 33d year of the reign of King Henry VIII. (c. 9.) and which was continued and enforced by the 13 Eliz. (c. 14.) Every man (except ſpiritual perſons and the judges) was obliged to uſe ſhooting, and to have a "*bow* and *arrows* ready continually in his houſe."

north

Digitized by Google

north of England; and ſoon extended into every county, recommending as Sir William Wood in his *Bowman's Glory* obſerves "*at leaſt itſelf as an exerciſe*, "*and though but in ſport and triumph*," to every Engliſhman) was owing to one of thoſe accidents which, however trifling in themſelves or confined to an individual, have ſometimes laid the foundation of much benefit to mankind.

About the year 1776, Mr. Waring (who reſided with Sir Aſhton Lever, at Leiceſter Houſe, and who may juſtly be ſtiled the *father* of *modern* archery) having, by continual application to buſineſs, contracted an oppreſſion upon his cheſt, (ariſing principally from ſitting too cloſely to his deſk, and preſſing his breaſt too much againſt it, and which the moſt eminent of the faculty had in vain endeavoured to remove), reſolved to try the effect of the bow in affording himſelf relief. He accordingly made it a regular exerciſe, and in a ſhort time derived great benefit from the uſe of it; and aſcribes his cure, which was perfect, ſolely to the uſe of archery. Sir Aſhton Lever, perceiving the good effects, which ſo engaging an amuſement had upon the conſtitution, followed Mr. Waring's example, and took up the bow; he was ſoon joined by ſeveral of his friends, who, in the year 1780, formed themſelves into a ſociety, under the title of *Toxophilites*, and met regularly at Leiceſter Houſe, having butts erected in the gardens belonging to it. And this ſociety was the parent ſtock of the numerous ſocieties of Archers, known at this day; except thoſe, which I have before noticed, as exiſting prior to this late revival of archery (4).

On

(4) For a liſt and an account of theſe ſeveral ſocieties, ſee *Moſeley*, p. 230. *Hargrove*, p. 73. *Oldfield*, p. 73. With ſuch liberality

On the ſcore of *health* then we find, that archery holds out to us a ſtrong inducement to value and uſe it as an exerciſe. Its value indeed upon this account, does not reſt ſolely upon a ſingle fact. Aſcham, who was himſelf a valetudinarian, and of weak body, (and therefore thought it neceſſary to ſpend many hours in ſuch exerciſes, as might afford the beſt relief and relaxation, after the fatigues of ſtudy), has in ſeveral pages of his treatiſe upon the art, recommended the practice of it, as an *innocent*, *ſalutary*, *uſeful*, and *liberal* diverſion. In his own words, "It is an exerciſe moſte "holſome, and alſo a paſtime moſte honeſte; wherein "laboure prepareth the bodie to hardneſſe, and the "mind to couragiouſneſſe (5), ſuffering neyther the "one to be made with tenderneſſe, nor yet the other "to be hurte with ydleneſſe," and, comparing it with other exerciſes and amuſements, adds, "therefore, to "loke on all paſtimes and exerciſes holeſome for the "bodye, pleaſaunt for the minde; comlye for every "man to do; honeſte for all other to loke on; profit-"able to be ſet by of every man; worthy to be rebuked "of no man; fitte for all ages, perſons, and places; "onlye ſhootinge ſhall appeare, wherein all theſe com-"modities may be founde." Biſhop Latimer (in a ſermon preached before King Edward VI.) obſerves, "It is a goodlye arte, a holeſome kynde of exerciſe, "and much commended in phiſike," and quotes Mar-

liberality of ſentiment was the revival of archery embraced, that a mutual exchange of honorary freedoms ſoon took place between theſe ſocieties and the Toxophilites; which confers upon the latter, the privilege of being received, as archers, in the different ſocieties in Great Britain.

(5) "For bows the ſtrength of brawny arms imply
"Emblems of valor and of victory.
Dryd. Flower and the Leaf.

Tum validis flexos incurvant viribus arcus
Pro ſe quiſque viri. *Æneid. Lib. 5. l. 500.*

cilius

Digitized by Google

cilius Phiſinus, who ſays, " it wraſtleth agayniſte manye " kyndes of diſeaſes." *Latimer's Sermons.* (Ser. 6, before King Edward VI.) And Wood, who doubtleſs was a better archer than *poet*, ſpeaks to the ſame effect:

" It is an exerciſe (by proof) we ſee,
" Whoſe practice doth with nature beſt agree.
" Obſtructions of the liver it prevents,
" Stretching the nerves and arteries, gives extents
" To the ſpleen's oppilations, clears the breaſt
" And ſpungy lungs: It is a foe profeſt
" To all conſumptions:"

Bowman's Glory. (6)

To young perſons, Aſcham ſtrongly recommends the practice of archery; not only as an happy and honorable ſubſtitute for many unworthy amuſements and expenſive follies, (eſpecially for that terrible propenſity to gaming, which he ſeriouſly deprecates and laments, as the great bane of the age in which he lived) but alſo on account of the manlineſs of the diverſion, and of the ſhare it may fairly claim in the preſervation of the health: for this exerciſe evidently tends to ſuppreſs effeminacy, to invigorate the nerves, and to increaſe the ſtrength of the body. With his ſentiments upon this ſubject, thoſe of a modern writer (Mr. Saltzmann) perfectly accord. The latter, in conſidering the gymnaſtic exerciſes proper for youth, ſpeaks of *archery*, as an exerciſe, in terms of high commendation. *(Gymnaſt. Exerciſes.)* And Dr. Mulcaſter (a cotemporary of Aſcham, and maſter of Merchant Taylors, and, afterwards, of Saint Paul's ſchool, who publiſhed a treatiſe on the education of youth), ſpeaking of ſhoot-

(6) Wood lived to prove the truth of his remarks; he died at a very advanced age. And his epitaph tells us,

" Long did he live the honor of the bow,
" And his long life to that *alone* did owe."

Barrington.

Digitized by Google

ing with the long-bow, obſerves, " to ſay enough of " this exerciſe in few words, (which no words can " praiſe enough for the commodities which it bringeth " to the health of the body), it conſiſteth of the *beſt* " exerciſes, and the beſt *effects* of the beſt exerciſes." *Poſitions*, chap. 26.

Indeed, of ſo much importance to youth was deemed the knowledge and exerciſe of archery, in the reign of Queen Elizabeth, even at the time when the long-bow, as a weapon of war, was falling into neglect; that we find, by the orders, ſtatutes, and rules made in the 33d year of that reign, for the government of Harrow School, (erected and endowed by patent in the 14th year of the ſame reign); it was a condition, which every parent and other perſon, who ſent a boy to the ſchool, was obliged to obſerve; " that he ſhould allow " the child at all times, a bow, three ſhafts, bow-ſtrings " and a bracer, to exerciſe ſhooting." See a deſcription of Harrow in the *Topographer*, for the year 1791, vol. 4. In conſequence of this regulation, there has been obſerved at the ſchool, till of late years, an annual ſhooting with the Engliſh long-bow, for a ſilver arrow. This regulation reſpecting archery, probably, took place in compliance with the ſtatute of the 13 Eliz. c. 14. which, after declaring archery to be " *an wholeſome exerciſe for* " *the health and ſtrength of men*," directs all the ſtatutes for the ſuppreſſion of unlawful games and for the maintenance of archery, to be put in execution: and conſequently (among others) the 33 H. 8. c. 9. which enacts, " that the fathers and governors of perſons " under age, ſhall teach them ſhooting, and provide for " them a bow and two ſhafts." This manly exerciſe had a general continuance to the Reign of Charles I. for we find in many hoſpitals founded in that reign, among the articles of benefaction recorded upon their walls,

Digitized by Google

walls, this ſingular proviſion; "*Arms for the Boys,*" which ſignifies *Bows and Arrows.* (*Gent. Mag.* for 1783, vol. 53. p. 762.)

Nor is this exerciſe (like moſt others) the peculiar advantage and amuſement of *early* days; for Aſcham juſtly remarks, "that the labour which is in "ſhooting, of all other is beſt; not only becauſe it "encreaſeth ſtrengthe, and preſerveth healthe moſt; "but becauſe it is not vehement, but *moderate*; *not over-* "*layinge anye one parte with wearineſſe, but ſoftlye exer-* "*ciſinge everye parte with equalneſſe*; as the arms and "breaſtes with drawinge, the other partes with goinge; "being not ſo painful for the laboure, as pleaſaunt for "the paſtime, which exerciſe (by the judgement of "phyſitions) is moſte alowable." It may with truth be ſtiled the *friend* of *old age.* And we ſee old archers continue the diverſion with ſatisfaction to themſelves, and pleaſure to others; and although, when very far advanced in life, they find their ſtrength ſomewhat give way; yet do they not perceive any loſs of *ſkill* in the art: by changing their ſtrong bows, for thoſe which are weaker, they ſeldom perceive the want of very powerful nerves; but in purſuing this amuſement, can

"——bid old age grow green and wear a ſecond ſpring."
Armſtrong, Art of Preſerving Health.

On another account too, archery may deſerve attention. One known effect of bodily exerciſe, is, that of relieving the mind from a depreſſion of ſpirits; and it is but juſtice to this art, to obſerve, that it can promote this effect in a ſuperior degree. Walking, riding, and many other exerciſes, although well calculated to exhilarate and raiſe the ſpirits; yet if vehemently purſued cannot be ſo long; if languidly followed, they leave the mind open to an inſenſible aberration: and in that interval, the cauſe of its uneaſineſs has time to return and

Digitized by Google

prey upon the nerves. But archery being more a *regular* and *conſtant*, than a violent exerciſe, leaves but little time for intruding thoughts; and indeed requires, (and in a peculiar manner arreſts) the attention both of the *eye* and the *mind:* inculcating and ſtrongly enforcing a calmneſs and tranquility, free from the interruption of the tumultuous paſſions. If uſed in ſociety, this effect is ſtill greater; and emulation muſt at leaſt for a time,

"Drive melancholy from the *haunted* brow."

Nor does the *care* of the bow ceaſe, when it is unbent; for if the mind ſtill requires active employment, the bow is always at hand; and the lover of archery, the more he becomes acquainted with the art, the more he will find himſelf inclined to imitate the great *Alfred* (7), and give ſome of his ſpare time to trim his bow and ſhafts. And he will ſoon diſcover, that they are capable of leading him to numberleſs experiments, which will call forth his genius and attention.

(7) See an anecdote to this purpoſe, in *Aſſer. Ælfredi rebus geſtis.* p. 9. Spelman's *Life of Alfred*—or, *Moſeley.* p. 216.

SECTION

Digitized by Google

SECTION II.

Archery uſed as an Exerciſe by the firſt Perſonages in all Nations—Faſhionable in England in the times of Henry VIII. and his Succeſſors, till the Revolution—Cauſes of its former Decline—Modern Archery patroniſed by the Prince of Wales and the Nobility—in the hands of the Fair Sex—Defence of it in their hands—Value of Archery in promoting liberal and friendly Society—Peculiarity of its tendency in this reſpect—Unreſtrained Pleaſures of the Amuſement.

THIS manly exerciſe and truly princely amuſement, has, in all nations, attracted the notice and engaged the ſupport, of the higheſt orders of men. Many Eaſtern Princes continue it to this day. Aſcham tells us, that of all other paſtimes "it is moſte fitte and "agreeable with learning and learned men:" and he mentions, that ſeveral Biſhops of his own time practiſed themſelves much in archery. Indeed, it ſeems to be a diverſion, in which the *clergy* may engage, "*being* "*on that account worthy to be rebuked of no man.*" He has alſo noticed many Eaſtern Princes and Roman Emperors, who were proud of exhibiting their ſkill in the art: and among other great perſonages, particularly praiſes Henry VIII. who took every opportunity, and uſed every means, to encourage archery; himſelf affording an example of no ſmall ſkill in the art (8). In his reign

(8) Aprés allerent tirer de l'arc, & le Roy d'Angletterre luy-"meſme, qui eſt merveilleuſement bon archer & fort, & le

 "ſeſoit

reign it ſeems to have been a very faſhionable amuſement; and his brother (Prince Arthur) became ſo expert in the uſe of the long-bow, that a good archer was honored by being ſtiled *Prince Arthur* (9). In this amuſement he was followed by Edward VI. and Charles I.—Nor was it inattentively regarded by Charles II. and James II. in whoſe reigns it continued to find favor and patronage. It is ſaid that James I. of Scotland was ſo much ſtruck with the ſpirit and gallantry of the Engliſh archers, that (on returning to his own country, after his confinement in England), he eſtabliſhed royal companies of bowmen, in ſeveral parts of his dominions; ſome of which ſtill flouriſh. *(Moſeley, p. 228, note.)* The abdication of James II. and the ſucceſſion of a family little acquainted with this kingdom and its amuſements, would naturally have denied to the bow, its former ſupport and encouragement. Hence it was, that archery, (driven to ſeek an aſylum where from the earlieſt period of its exiſtence in this country, it had in all times found zealous patronage and ſupport), lay ſo long a time concealed, in the remote corners of the kingdom. At this day, it muſt be conſidered as no ſmall favor conferred upon archery, that his Royal Highneſs the Prince of Wales, and many of the nobility and firſt perſonages in this kingdom, have condeſcended to patroniſe and encourage the revival of this once much eſteemed art: nor ſhould it be forgotten, that our preſent gracious Monarch was pleaſed (a few years

" feſoit bon voir." *Meeting between* Henry VIII. and Francis I. in the Field of the Cloth of Gold between Ardres and Guines.

Montfaucon, Monumens de la Monarchie Francoiſe, vol. 4. p. 199.

" Nemo enim ipſo rege (Henry VIII.) Britannicum ingentem " arcum contentius flexit, nemo certius atque validus ſagittavit." *Paul. Jov.*

(9) In the year 1581, a ſociety of archers exiſted, who ſtiled themſelves, *Prince Arthur's Knights*. *Mulcaſter's Poſitions*. p. 101.

ſince)

Digitized by Google

ſince) to revive the ancient royal prize, annually ſhot for by the royal company of archers in Scotland. (*Barrington*). But to modern days, was reſerved the high and ſingular honor, which archery has received, at the hands of the *fair ſex*; who have ſtep'd forward at once to patroniſe, and to grace the exerciſe of it. One indeed among the reſt, (whoſe exalted rank and acknowledged excellence ſtamps additional value upon every thing ſhe deigns to notice) has taken up the bow. What greater encouragement can art expect or deſire? Our ſturdy anceſtors, whoſe ſteady well braced nerves, enabled them to draw to the head their *yard-long* arrows (which pierced the ſtrongeſt armour, and ſtruck their fierceſt foe to the ground) would have been proud, to have witneſſed ſo flattering an attention to their favourite art; to have ſeen the neatly trimmed ſhaft looſed from the fair hand of an Engliſh Female; giving an example of *ſkill* to the rougher ſex, and wanting but their *ſtrength*, to contend with the enemies of their country.

This new æra, as it has been ſtiled, in the annals of archery, is condemned by ſome, as introducing to the other ſex an amuſement, too maſculine to accord with the gentleneſs of manner, which ſhould at all times characteriſe it. But this cenſure ſeems to be ſomewhat unmerited and ill-timed: for, as a late writer (Moſeley) juſtly obſerves, it is unfortunate, that there are few diverſions in the open air, in which women can join with ſatisfaction: and archery ſeems to be an admirable antidote to the ſedentary life, which is incident to the general employment of their time. On another account indeed, they are gainers by the amuſement; the attitude of an archer drawing the bow has been deemed worthy of notice, and cannot fail of diſplaying the graces of the female form, in a conſiderable degree.

Digitized by Google

Since then archery has again raiſed its head, crowned with ſuch diſtinguiſhed honors, and offering ſo much pleaſure and advantage; let us receive it with due reſpect; and pay our tribute, by continuing to cultivate the art: not overlooking the merit of thoſe, who have beſtowed their endeavours to draw it from an undeſerved neglect and obſcurity. And although the Engliſh long-bow has been diſmiſſed (honorably ſo we muſt confeſs) our ſervice in the field; let us not forget the bleſſings we ſtill enjoy, through the former exerciſe of its powers, and the value of the liberal, friendly and ſelect ſociety, which, in its preſent humble ſtate, it is ſo well calculated to promote and preſerve. Society and friendly intercourſe are, it is true, common to many amuſements; though perhaps not to be enjoyed to the degree of delight (combining our health with our paſtime) which archery admits of. In this exerciſe, our Friends, both young and old, can engage with pleaſure and ſatisfaction. At home, we may content ourſelves with gaining a moderate portion of exerciſe and health, by ſhooting ſhort diſtances; abroad, theſe may be obtained in a ſuperior degree. Purſuing this amuſement, we may, at pleaſure, encounter the ſharp air of the mountain, or inhale the milder breeze of the valley; *roving* (or ſhooting various lengths, to the extent even of the utmoſt powers of the bow, and of our own ſtrength), over the moſt beautiful parts of the country, and in the moſt delightful ſeaſons of the year (advantages which no other amuſement can afford) when

" Fair-handed *ſpring* unboſoms ev'ry grace;
" Nor is the mead unworthy of thy foot,
" Full of freſh verdure, and unnumber'd flowers,
" The negligence of nature, wide, and wild;
" Where, undiſguis'd by mimic art, ſhe ſpreads
" Unbounded beauty to the roving eye."

Thompſon's Spring.

Or

Digitized by Google

Or when,

" From bright'ning fields of ether fair diſclos'd,
" Child of the ſun, refulgent *ſummer* comes,
" In pride of youth.

Thompſon's Summer.

Or,

" while his ſweeteſt beams
" The ſun ſheds *equal* o'er the meeken'd day;

Thompſon's Autumn.

Till,

" When the chearleſs empire of the ſky
" To Capricorn the Centaur Archer yields;
" And fierce *Aquarius* rules th' inverted year."

Thompſon's Winter.

PART

Digitized by Google

Digitized by Google

PART III.

AN INQUIRY AND INVESTIGATION INTO SUCH EXTRAORDINARY FEATS, AS ARE SAID TO HAVE BEEN ACHIEVED WITH THE ENGLISH LONG-BOW, IN FORMER TIMES; AND PARTICULARLY BY THAT GREAT HERO OF ARCHERY ROBIN HOOD; WITH AN ACCOUNT OF THAT FAMOUS OUTLAW FROM THE MOST AUTHENTIC RECORD: AND A COMPARISON OF THOSE FEATS OF ARCHERY, WITH SUCH AS ARE WELL ATTESTED IN MODERN TIMES.

Digitized by Google

Digitized by Google

CHAPTER I.

SECTION I.

Preliminary Obſervations—Truth of the Exiſtence and Hiſtory of Robin Hood.

THE preceding *military* hiſtory of the Engliſh long-bow, affords us ample teſtimony and ſatisfactory proof, that "in the hands of *numbers*, it performed "*verie greate matters.*" And although we do not at this day, poſſeſs ſuch authentic records reſpecting the *private* feats of the bow; as have been adduced in ſupport of the effect of it, as a weapon of war: yet have we ſuch traditional annals of the achievements of individual ſkill and ſtrength in archery; as (corroborated by the opinion of thoſe, who, although they lived ſeveral ages ſubſequent to the time, when the great feats in archery were ſuppoſed to have been performed; yet as they lived much nearer that time, and when archery flouriſhed, had better opportunities of forming a more accurate judgement upon the truth of the facts in queſtion than we can command; and corrected by our own reaſon and experience) may enable us to determine, without being liable to the charge of much error or credulity, upon the truth of ſuch ancient tradition.—We have not, indeed, any one ancient and authentic hiſtory or record exactly to our purpoſe; and from ſuch ancient teſtimony or tradition, as we are acquainted with, little can be gleaned worthy of credit or attention.—Many, as the proverb ſays, "*talk of Robin Hood who never ſhot with*

"*his*

Digitized by Google

" *his bow.*" The collection of old ſongs (which, for centuries, has decorated every ballad ſtall, under the title of *Robin Hood's Garland*, and which is the only record of the chief feats in archery of this celebrated character and his companions) ſo completely involves the actions they notice, in ſuch a cloud of marvellous narration and poetical fancy, that many, upon the peruſal of them, have thought themſelves warranted to declare their diſbelief, that any ſuch hero ever exiſted. A little reflection will teach us, that ſome of the moſt romantic popular traditions are grounded upon unqueſtionable facts, to which ſeveral of our ancient chroniclers and accurate hiſtorians bear teſtimony. That ſuch perſons as Robin Hood and his companions did live, and gave the moſt ſignal proofs of their great ſkill in the uſe of the long-bow; we have the teſtimony of ſeveral eminent hiſtorians, upon whoſe veracity we can depend (1).

SECTION

(1) Robin Hood is noticed by Fordun, in his *Scotichronicon:* by Stow and Hollinſhed. But the moſt particular account of this hero and his companions, is to be found in Johannes Major (the Scottiſh hiſtorian,) which is copied by Grafton in his " *Chronicle of* " *Bretayne*, (page 82)" in theſe words. " About this tyme " (anno 1189) as ſayth John Maior, in his chronicle of Scotland, " there were many robbers and outlawes in England; among " the which number, he eſpecially noteth Robert Hood, whom " we now call Robyn Hood, and little John, who were famous " theues. They continued in woodes, mountaynes, and foreſtes, " ſpoyling and robbing, namely, ſuch as were riche. Murders " commonly they did none, except it were by the prouocation of " ſuch as reſiſted them in their riſelynges and ſpoyles. And the " ſayde Maior ſayth, that the aforeſaid Robyn Hood had at his " rule and commandement an hundreth tall yomen, which were " mightie men and exceeding good archers, and they were main- " teyned by ſuche ſpoyles as came to their handes: and he ſayth " moreouer, that thoſe hundreth were ſuch picked men, and of " ſuch force, that four hundreth men, whoſoever they were, durſt " never ſet upon them. And one thing was much commended " in him, that he would ſuffer no woman to be oppreſſed, vio- " lated or otherwiſe abuſed. The poorer ſort of people he fauoured

" fauoured, and would in no wiſe ſuffer their goodes to be " touched or ſpoyled, but relieued and ayded them with ſuch " goodes as hee gate from the riche, which he ſpared not; namely, " the riche prieſtes, fat abbotes, and the houſes of riche earles. " And although his theft and rapyn was to be contemned, yet " the aforeſayd auƈthour prayſeth him, and ſayth, that among the " number of theeues, he was worthie the name of the moſt *gen-* " *tle* theefe.

" But in an olde and auncient pamphlet, I finde this written of " the ſayd Robert Hood. This man (ſaith he) deſcended of a " noble parentage, or rather beyng of a baſe ſtocke and linage, " was, for his manhoode and chiualry, aduanced to the dignitie of " an Earl; excellyng principally in archery or ſhooting, his manly " courage agreeing thereunto: but afterwardes, he ſo prodigally " exceeded in charges and expences, that he fell into great dabt: " by reaſon whereof, ſo many actions and ſutes were commenced " againſt him, whereunto he aunſwered not, that by order of lawe " he was outlawed. And then for a lewde ſhift, as his laſt re- " fuge, gathered together a companye of royſters and cutters, and " practiſed robberyes and ſpoylyng of the Kinges ſubjects, and oc- " cupied and frequented the foreſtes or wilde countries. The " which being certefyed to the King, and he being greatly of- " fended therewith, cauſed his proclamation to be made; that " whoſoever would bring him quicke or dead, the King " would geue him a great ſumme of money, as by the records in " the exchequer is to be ſeene: but of this promiſe, no man " enjoyed any beneſite. For the ſayd Robert Hood, being after- " wardes troubled with ſickneſſe, came to a certein nonry in " Yorkſhire, called Berklies; where, deſiryng to be let blood, " he was betrayed and bled to death. After whoſe death, the " Prioreſſe of the ſame place cauſed him to be buried by the " high way ſide, where he had uſed to rob and ſpoyle thoſe that " paſſed that way: and upon his graue the ſayde prioreſſe did " laye a very fayre ſtone, wherein the names of Robert Hood, " William of Goldesborough, and others were graven. And the " cauſe why ſhe buryed him there, was, for that the common paſ- " ſengers and trauailers, knowyng and ſeeyng him there buryed, " might more ſafely and without feare, take their jorneys that " way; which they durſt not do, in the life time of the ſaid out- " lawes: and at eyther ende of the ſayd tombe was erected a " croſſe of ſtone, which is to be ſeene at this preſent."

The author of the *New Garland* has collected a great variety of intereſting anecdotes, explanatory of the hiſtory of this famous outlaw, and his companions; which he has ſubjoined to his life. See *the Notes to the Life of Robin Hood.*

In the reign of Edward III. we find mention of a band of robbers, which in time grew ſo numerous and formidable, as to become a terror and grievance to the whole kingdom. But they ſeem to have poſſeſſed very little of that liberal and benevolent ſentiment, for which Robin Hood and his men were ſo much noted. *Barnes*, B. 1. c. 4. p. 62.

SECTION

Digitized by Google

SECTION II.

Teſtimonies reſpecting Robin Hood's Feats of diſtant *Archery—Obſervations—Shots from Turkiſh Bows —Shot from a Bow drawn with both Hands—Diſtant Shots by modern Archers—Obſervations on Robin Hood's Archery.*

THE feats recorded of this renowned bowman, may be conſidered as evidences of extraordinary ſtrength, and extraordinary ſkill. Probably, the old pamphlet, mentioned by Grafton in his chronicle, contained ſomewhat upon the ſubject. As our hero lived and died, long before the art of printing was known; we may well ſuppoſe, that the ſongs made upon him during his exiſtence, and for a conſiderable period of time after his deceaſe, were committed to *oral* tradition: and conſequently became ſubſervient to the defective memory, and the fancy of thoſe, who from time to time, tranſmitted them to poſterity. Some of them indeed, bear evident marks of high antiquity; while others can lay claim only to what (conſidering the many centuries which have elapſed ſince the time, when the actions they celebrate, were achieved) may, perhaps, be ſtiled a *modern*, although not a very *recent* period of birth (2). Theſe ſongs celebrate various feats and pranks of this hero, ſome of which may juſtly, to uſe Dr. Hanmer's words, "be ranked among the *lies* of the land."

(2) The editor of the *New Garland*, has endeavoured, by great induſtry, to aſcertain the æra of almoſt every ſong; which he has prefixed to it.

The

Digitized by Google

The firſt ſong in the Garland informs us, that Robin Hood's *Father* ſhot,

" *Two* north country *miles* and an *inch* at a ſhoot."

But leaving ſuch authority as this and moſt of the ſongs in this collection afford us; we will refer to ſuch other teſtimonies reſpecting Robin Hood's exploits, as have been ſomewhat credited, and do not ſo much offend our reaſon, or deride our judgment. One of them is noticed by Charlton (in his *Hiſtory of Whitby Abbey*, p. 146), who ſays; " tradition informs us, that " Robin Hood and Little John ſhot each an arrow, " from the top of Whitby Abbey, which fell not far " from Whitby Laths; and in memorial thereof, a " pillar was ſet up by the Abbot, in the place where " the arrows fell: and that their diſtance from the Abbey " was *a meaſured mile*."

Dr. Meredith Hanmer (in his *Chronicle of Ireland*) ſpeaking of Little John, obſerves, " there are memo- " rable acts reported of him, which I hold not for a " truth; that he would ſhoot an arrow a mile off, and " a great deal more: but theſe I leave among the " *lies* of the land."

Mr. Walker (in his *Hiſtorical Eſſay on the dreſs of the ancient and modern Iriſh*) ſays, " according to tra- " dition, Little John ſhot an arrow from the old Bridge, " Dublin, to the preſent ſcite of St. Michael's Church, " a diſtance not exceeding, he believes, that men- " tioned by Mr. Barrington, as the greateſt length, viz. " *eleven ſcore and ſeven yards* (3).

The

(3) Mr. Barrington (in a poſtſcript to his *Obſervations on Archery*) endeavours to correct the error he had committed, in ſuppoſing *eleven ſcore and ſeven yards* to be the utmoſt extent an arrow can be ſhot; and obſerves, that the greateſt length ſhot at the London marks (according to the map) was *thirteen ſcore and five yards*.

Digitized by Google

The next authority upon the ſubject, is that of Drayton the poet, whoſe character for truth and hiſtorical accuracy ſtands very high; and indeed the fact he mentions is *ſomewhat* more adapted to our comprehenſion than thoſe before noticed. Speaking of Robin Hood and his companions; he ſays,

" At marks full *forty ſcore*, they uſed to prick and rove."
Poly-Olbion, Song 26.

The editor of the *New Garland* has hazarded an opinion in ſupport of Drayton, whom he calls a well informed and excellent man, " who wrote before " archery had fallen into complete diſuſe." And in his *notes to the Life of Robin Hood*, (note K. p. 33) tells us, " their archery indeed was unparalleled, as both " Robin Hood and Little John have *frequently* ſhot an " arrow a *meaſured mile*, (or 1760 yards,) which, it is " ſuppoſed, no one either before or ſince, was ever " able to do." But he brings no other authority in ſupport of his aſſertion, than that from Charlton before noticed. Whatever may have been the information and general knowledge of Drayton, we cannot altogether ſubſcribe implicitly to his opinion upon this ſubject. At the time he lived, archery had fallen ſo much into decay, that Hollinſhed (who publiſhed his Chronicles of England ſoon after the *birth* of Drayton) obſerves, *that in his time*, " *we had in a manner given over the artillery* " *of long bows, and did uſe to ſhoot compaſs for our paſtime.*" But without calling Drayton's knowledge of archery

Mr. Barrington was not, it is true, an *archer*; but had he conſulted the liſt of marks ſet down in the " *Aime for the Finſbury* " *Archers*," he would have found ſeveral of them to be *eighteen ſcore and eighteen yards:* indeed in the map he did conſult, one appears to be fifteen ſcore and eight yards, and another *ſixteen ſcore and two yards:* and he might have been ſatisfied by the Finſbury archers of *his* day, that ſeveral of them had, at the Finſbury marks, *frequently* ſhot *fifteen* ſcore yards, and upwards.

into

Digitized by Google

into queſtion, we cannot ſurely with any ſort of *gravity* admit (ſpeaking of Robin Hood and his men) that

" Their *looſe* gave ſuch a twang, it might be *heard* a *mile*."
Poly-Olbion, Song 26.

Indeed this advocate for Drayton's accuracy has himſelf ſaved us the neceſſity of any further comment upon this marvelous feat; ſince in a ſubſequent note, (*note* Y.) he gives us the following remark, from Fuller's Worthies. " Surely the poet gives a *twang* to the *looſe of* " *his arrow*, making him ſhoot one a *cloth yard long*, *at* " *full forty ſcore mark*, *for compaſs never higher than the* " *breaſt*, *and within leſs than a foot of the mark*;" and he adds, " but herein our author hath verified the pro- " verb; talking at large of Robin Hood, in whoſe " bow he never ſhot."

The length of the ſhot from Whitby Abbey is in a great meaſure accounted for, when it is recollected, that Whitby Abbey was a very lofty building, ſituated upon a very *high* cliff, and therefore cannot ſtrictly be called a *fair* ſhot: but even allowing this advantage, we may ſtill be permitted to *doubt*, if either of the arrows fell *near* the ſuppoſed diſtance, which is far greater than any arrow ſhot by the ſtrongeſt man and beſt archer, even from a *Turkiſh* bow, was ever known to fly (4).

In

(4) Of all bows that have been invented, and with which we are now acquainted, no one (in point of force, certainty, and effect) has come ſo near the Engliſh long-bow, as the Turkiſh bow. Although Knowles (in his *Hiſtory of the Turks*, p. 517) tells us " that the *Perſians* uſed both *greater* and *ſtronger* bows, and ſhot " more deadly arrows than the Turks." The very great elaſticity of the *horn* bow gives it greatly the advantage of the wooden bow, in the *diſtance of its caſt*: and had not Aſcham, Sir John Smith, and other writers, confidently and upon known experience, affirmed the ſuperiority of the Engliſh bow in war; we might be inclined to eſteem the Turkiſh bow as the *rival* of the Engliſh long-bow. However, in judging of the *effect* of weapons when

 uſed

Digitized by Google

In later times we have, upon the archer's own authority, an anecdote of a curious experiment with the bow;

uſed in war, we muſt not forget the diſtinguiſhing *characters* of thoſe who make uſe of them. For doubtleſs, with the ſame weapon, the coolneſs, courage, and diſcipline of the Engliſh, muſt have given them great advantage; oppoſed to the intemperate, and diſorderly mode of warfare uſually remarked among the Turks. The elaſticity of the horn-bow is capable of communicating a ſurpriſing velocity to the arrow diſcharged from it; but, probably, it is not calculated to caſt ſo *heavy* an arrow as the bow of wood; and its velocity diminiſhes its *certainty* of caſt. Many very ſurpriſing long ſhots are well atteſted to have been made, with the Turkiſh bow. Stuart (in his *Antiquities of Athens*, vol. i. p. 10) mentions a random ſhot made, in the year 1753, by Haſſan Aga the *waiwoode of Athens*, who delighted in Archery, to have been *five hundred and eighty-four yards and one foot* (Engliſh meaſure). Cantimir (in his *Hiſtory of the Otman Empire*) ſpeaking of the Emperor Murad IV. ſays, "in the art of ſhooting with the bow, he had "not his equal in the whole Turkiſh nation, except the famous "champion Tozcoparan. There are now two marble pillars "ſtanding *fifteen hundred cubits* aſunder, over which he is ſaid to "ſhoot an arrow." Tozcoparan is ſaid to have ſhot *ſeventeen hundred cubits*. In the year 1795, Mamhood Effendij, ſecretary to the Turkiſh Ambaſſador, a man poſſeſſing very great muſcular power, ſhot an arrow with a Turkiſh bow *four hundred and eighty two yards* in the preſence of three gentlemen, members of the Toxophilite ſociety, now living; who meaſured the diſtance, and to whom he obſerved, that the preſent emperor (Sultan Selim) could ſhoot further than any one of his ſubjects. In the year 1798, the ſultan himſelf exhibited a proof of his great ſtrength and ſkill in archery; by ſhooting (in the preſence of Sir Robert Ainſlie, late ambaſſador to the Ottoman Port) an arrow, which drove into the ground at the diſtance of fourteen hundred pikes (Turkiſh meaſure), or, *nine hundred and ſeventy two yards two inches and three quarters* (Engliſh meaſure): and which diſtance was meaſured in the preſence of Sir Robert Ainſlie. The arrows uſed by the Turks, for very long ſhots, do not exceed the length of twenty ſix inches, but they are drawn ſeveral inches within the bow, in a grooved horn uſed for the occaſion: they are tapered from the nock to the pile, which is exceedingly ſmall, and weigh about three ſhillings and two-pence Engliſh arrow weight. It muſt occur to every one, that a bow, capable of carrying even a light arrow ſo great a diſtance, muſt be capable of caſting an heavy one a leſs diſtance with very great force. Accordingly, we read of arrows caſt from Turkiſh bows, which penetrated the *beſt made armour*.

Digitized by Google

bow; by means of which, an arrow was caſt a mile in *three* flights. To effect this, the archer, according to Mr. Barrington's report of the feat, *ſat on a ſtool*, the middle part of his bow being faſtened to his foot, which he elevated forty-five degrees; and he drew the ſtring with his two hands applied to it. The bow, uſed upon this occaſion, was a very ſtrong one, made for the experiment. Mr. Moſeley mentions an archer, who made a good ſhot in the preſence of Henry VIII. in a ſimilar way; and that he himſelf tried the experiment with ſucceſs. *Moſeley*. p. 90 to 93.

Theſe ancient inſtances of very *diſtant ſhooting* with the Engliſh long-bow are all I have been able to collect, and, probably, they are all that have been handed down to us (5): and if thoſe reported of Robin Hood were to reſt upon the authorities I have quoted, we might be inclined to refuſe our aſſent to his accompliſhment of ſuch extraordinary feats. It may, therefore, afford us much ſatisfaction, and, perhaps, be the means of removing doubt, if we aſſay the truth of the facts ſtated to us, by eſtabliſhing, as a boundary to conjectural opinions, that meaſure, which our reaſon, knowledge, and experience naturally point out.

armour. Lord Bacon, indeed, goes ſo far as to ſay, that a Turkiſh arrow hath been known to pierce a *ſteel* target or a piece of *braſs two inches thick*. (*Nat. Hiſt. Expt.* 704, vol. iii.) But this feat Mr. Moſeley juſtly ſtiles *marvellous*; and obſerves, "that to contra-"dict ſuch high authority might, perhaps, do greater violence "to good manners, than *truth*." *Moſeley*, p. 71, *note*. Yet Greaves, in his *Pyramidographia*, and Barclay, in his *Icon animorum*, notice ſimilar facts. *Hooper's Rat. Recreat.* vol. 1. p. 198. *edit.* 1783.

(5) Strutt, the diligent inveſtigator of Engliſh antiquities, who, in the preface to his *Horda-Angelcynnan* informs us, he had ſearched very many manuſcripts; obſerves, "that it was not "certain, how far the archers with the long bow could ſend an "arrow." *Hord. Angel.* vol. ii. p. 44.

Digitized by Google

We are well ſatisfied that in *modern* times, no man hath ſhot an arrow *one fourth* part of a mile. Mr. James Rawſon (of Cheetham Hill, near Mancheſter, who died about the year 1794, the beſt archer of his day), told Mr. Waring, that he once ſhot, upon ground, very little declining in his favour, *eighteen ſcore yards*. And in the year 1798 Mr. Troward (a member of the Toxophilite Society) ſhot on Moulſey Hurſt (an uncommon level piece of ground, and when the wind was very ſtill) ſeventeen ſcore yards (6). It is not believed, that, for at leaſt a century or two paſt, the two laſt mentioned inſtances of diſtant ſhooting have been ſurpaſſed.

That we do not at this time when archery is uſed merely as an amuſement, exerciſe ourſelves in ſuch ſtrong ſhooting as our forefathers did, is true: conſequently, we muſt not form our judgment too peremptorily of what was done in archery, when in its prime; by what we have heard was performed in its decline, or have ſeen achieved in its preſent humble ſtate: yet can we make due allowance for early habit and conſtant practice, which we know will effect ſurpriſing things. Theſe advantages Robin Hood poſſeſſed in their full extent, "his manly courage," as his Hiſtorian ſays, "agreeing thereto." We may alſo admit the fact recorded of him, "that in his "youth, he drew a prodigious ſtrong bow:" and we

(6) This ſhot made by Mr. Troward, was not an *accidental* ſhot: he *repeatedly* ſhot (both up and down the wind) that diſtance, the ſame day, in the preſence of many members of the Toxophilite ſociety. As his ſhots were made during a conteſt for a prize, each ſhot was meaſured with the greateſt poſſible accuracy. And the field had been previouſly ſtaked out in *ſcores*, and *half ſcores*. Mr. Troward ſhot with a *ſelf*-bow, of the power of *ſixty-three* pounds. His arrows were flight arrows, of the length of twenty-nine inches, and weighing about four-ſhillings (arrow weight.) The bow with which Mr. Rawſon ſhot was a *back'd*-bow.

muſt

Digitized by Google

muſt certainly acknowledge, that he was a moſt *complete* archer. No doubt many of his companions (who Grafton ſays, were *picked* men) were excellent archers, and perhaps rivalled this great hero himſelf, in the art. Not only their food, but their lives frequently depended upon their proweſs and ſkill in the uſe of the bow; and the life they led gave them ample opportunities of improving the latter. We muſt at the ſame time admit, that there have been in *modern* days, as ſtrong men as Robin Hood, who have practiſed archery. Mr. Rawſon followed it, from an early period of life; he was a very ſtout middle ſized man, and being a man's ſhoe-maker by trade; had, (in the exerciſe of his buſineſs) increaſed the force, and hardened the muſcles of his arms, to ſuch a degree, that his power over the bow was exceedingly great; as was his ſkill in the uſe of it; having (from the age of eighteen to ſixty) never refuſed a challenge in the art (*Hargrove*); and yet he never was known to have been beat at *inches*. What great power may be given to any part of the body, by early and conſtant uſe, is well known. The *arms* of a *waterman* or *blackſmith*, and the *legs* of a *chairman*, are concluſive evidence of the fact. Probably, Robin Hood himſelf did not poſſeſs much more bodily ſtrength than Rawſon. But archery was the *profeſſion* of the former, while the latter could only purſue it occaſionally, as an amuſement. In this reſpect therefore, conſtant uſe muſt be conſidered.

Digitized by Google

SECTION III.

Obſervations on the probable extent of Robin Hood's Shots, drawn from the Power of the Bow, ſuppoſed to have been uſed by him—Concluſion.

HAVING thus endeavoured to eſtabliſh upon experiment, a line to circumſcribe conjecture and doubt; and to form the baſis of a compariſon between the *ſtrength* and *ſkill* of man; the only circumſtance remaining, which may lead our judgment to its object, in this enquiry, appears to be, an attempt to aſcertain what *ſtrength* (or weight) of *bow* (7), the *ſtrongeſt*

(7) Mr. Waring was the firſt perſon in England, who hit upon the expedient of diſcovering the exact power of the bow, by *weight*. This method, according to Chevalier Chardin (ſee his *Voyages*, tom. ii. ch. 12.) has been long known and practiſed in Perſia.

By this means, we can aſcertain the quantity of weight, or power, which a man muſt *overcome*, before he can draw his bow fully up: for action and reaction being equal, it muſt require the ſame degree of power to *ſupport* the bow, as is required to draw the ſtring. So that when a man draws a bow of *fifty* pounds power or weight, he, *in fact*, ſuſpends or moves *one hundred pounds weight* between his arms. This may be proved in experiment, by keeping the bow with a weight, inſtead of ſuſpending it by means of a ſupport. The moving ſo great a weight with the body, with ſo much facility, may appear ſurpriſing; but we muſt recollect, how very much ſtrength is under the guidance of *art*; that in drawing the bow, we diſpoſe of our ſtrength, and exert our muſcles to the greateſt advantage; and that by a *general and united exertion* of muſcular power, we are capable of doing great things. It is the judicious management of our bodily powers, which (as Deſagulieres, in his Philoſophy obſerves) will, in a great meaſure, account for the very ſurpriſing feats of ſtrength, that have been exhibited by men.

man

Digitized by Google

man can draw, and looſe with a proportioned effect. One of the moſt muſcular and powerful men, and at the ſame time, one of the beſt archers yet living, has has been known to draw a twenty-ſeven inch arrow to the head, in a bow of *ninety pounds* weight; but he could not looſe an arrow from this bow, to a diſtance at all proportioned to the ſtrength of it. He found a bow of eighty pounds within his command; but from ſeventy to eighty pounds, is perhaps ſuch a medium ſtrength of bow, that *ſtrong* men in general can manage with eaſe, ſo as to enſure a good *looſe*; upon which moſt particularly, as well as upon the *ſpring* of the bow, not only good, but *far* ſhooting depends.

The bow with which Mr. Rawſon ſhot, drew about *ſixty-four* or *ſixty five pounds*; and if we compare the *diſtances*, that both Mr. Rawſon and Mr. Troward ſhot, with the *power* of their bows; we may, without coming to very nice calculation, allow *twenty* pounds weight, for every *one hundred and ten* yards. Now, ſuppoſing the bow uſed by Robin Hood, was even of *eighty* pounds *weight*; that, according to the preceding calculation, would caſt an arrow upwards of four hundred yards. And if, agreeably to the laws of the increaſed force of bodies, we allow for an accumulation of power, independent of the calculation by ſimple weight, yet upon the whole, we ſhall not find any ground confidently to conclude, that Robin Hood ever ſhot, even the *lighteſt* flight arrow, *five hundred yards* upon *level* ground. And we may with very great reaſon, rely upon what Neade, a writer upon archery in the beginning of the ſeventeenth century, obſerves; namely, that an ancient bow (8) would carry

(8) It is not believed, that any *very ancient* Engliſh long-bow is now in exiſtence: whereby ſome judgment might be formed of

Digitized by Google

carry *from eighteen to twenty ſcore yards*, as the *trueſt* point of *diſtant* archery. (9)

SECTION

of the power of the old bows. The author of the *notes to the Life of Robin Hood*, tells us, "that his *bow* and one of his arrows, his "chair, his cap, and one of his ſlippers, were preſerved, till "within the laſt century:" and he quotes from Ray's *Itineraries* (1760, p. 161) a paſſage, wherein that writer ſays, that Robin Hood's *bow* was kept at Fountains Abbey. According to a note of Mr. Aſhmole's (inſerted in the *European Magazine*, October, 1794, p. 295), part of a bow, formerly belonging to Little John, hung up (anno 1652) in the chancel of Featherſedge [Hatherſage] church, in the Peak of Derbyſhire, where he is ſaid to have been buried. The author of thoſe notes further adds, "he was in-"formed that a bow ſaid to have belonged to Little John, was (anno 1795) in the poſſeſſion of a gentleman in the Weſt Riding of Yorkſhire. (*Notes* GG, KK, LL.)

Mr. Boſwell (ſpeaking of Dunvegan Caſtle, in the Iſle of Sky, and Sir Roderick M'Leod, one of its ancient Lairds, called *Rorie More*), ſays, "we ſaw his bow, which hardly any man can now "bend." *Journal of a Tour to the Hebrides*, London, 1758.

A few bows, ſuppoſed to have been made about the beginning of the ſixteenth century, have been exhibited of late; but they did not, upon conjecture, appear to draw more than from ſeventy to eighty pounds, at the utmoſt. Upon the late revival of archery, a large parcel of bows, known to have been long ſecreted in a houſe in Scotland, was ſearched for: when it was diſcovered, that the ſervants of the houſe had been, for ſome time, in the habit of lighting fires with them. Fortunately, however, two or three of them were ſaved, one of which is ſaid to be now in the poſſeſſion of Lord Aylesford. In a *Survey of Forts and Garriſons* (made 30th July, 1623) we find notice taken of many hundred bows, bow-ſtaves, ſtrings, and ſheaves of arrows, then in the Tower, and other forts in England. *Muſ. Brit. Harl. MSS.* 1326. Upon inquiry at the Tower, I cannot learn, that any bows, bow-ſtaves, ſtrings or arrows, have been ſeen there for at leaſt half a century. Old bows are now more valuable as *curioſities*, than for uſe: for time has ſo dried them, that ſeveral (although well rubbed with linſeed oil) have, upon late trials, broke in bending.

(9) To this authority, we may add, that of Pére Daniel, who ſays, that an ancient bow would carry further than a fuſil, and to the diſtance of 600 *paces*. Mr. Moſeley obſerves, that if he means common military paces, each of which may conſiſt of two feet or rather more, the diſtance of the range may be ſet down at 400 yards. *Moſeley*, p. 266, *note*. Carew, in his Survey of Corn-

wall,

Digitized by Google

wall, ſpeaking of the ſtrength and excellence of the Corniſh archers, obſerves, " for long ſhooting their ſhaft was a cloth-yard, " their pricks *twenty four ſcore*; for ſtrength, they would pierce " any ordinary armour." By way of corroboration, it may be noticed, that upon the report of the late Mr. Conſtable (a Finſbury archer) there exiſts a by-law, or cuſtom of the city of London, (which he declared he had ſeen in the books of the corporation), that entitled any one to the freedom of the city, who could bring proof, that he had ſhot an arrow of a *pound* (20s.) weight, *eight ſcore*, or a *flight* arrow *twenty-ſeven ſcore*. But there appears to be ſome inaccuracy in this report: and inſtead of the flight diſtance being twenty-ſeven ſcore, it ſhould be only *ſeventeen ſcore*; the latter diſtance with a flight arrow, being equal to the eight ſcore diſtance with a pound arrow. As archery began to decline, diſtant ſhooting became neglected, which Hollinſhed notices. *Deſcrip. of Brit. Ch.* 16. In the *Aime for the Finſbury archers*, we find few diſtances at nine ſcore, moſt of them are from twelve to ſixteen ſcore, yet there are many from ſixteen to eighteen ſcore, and the greateſt length is *nineteen ſcore and fourteen yards*. The late Mr. Poole declared to Mr. Waring, that he had frequently ſhot an arrow (weighing nearly five ſhillings) *fifteen ſcore and ten yards* at the Finſbury lengths. And his cotemporary (the late Mr. Conſtable) told Mr. Waring, that one in his time ſhot *ſeventeen ſcore yards*. Sir William Hood informs us, that the *butts* ſhot at by the archers at the *ſhow and ſhooting* in 1583, were at the diſtance of *ſeven ſcore and eight* yards; and at the ſhooting in 1681, (before King Charles II.) the targets were placed upon butts at *eight ſcore* yards diſtance. By a target book of the Finſbury archers kept for the year 1671 (in the poſſeſſion of Mr. Howarth, a Toxophilite) it appears, that *eleven* ſcore yards was the fartheſt *target* diſtance ſhot by them, before the archers began to draw in.

SECTION

Digitized by Google

SECTION IV.

Robin Hood's Feats of Skill—Obſervations—Feats of Skill recorded of other Archers—Feats of Skill in Archery in modern times.

WITH reſpect to ſuch of Robin Hood's exploits, as were, more immediately, acts of *ſkill*; we have ſtill leſs authority, than what we have collected on the ſubject of his ſtrong ſhooting. In the inveſtigation of this latter point, the Garland is the only clew to guide us. In one ſong we are told, that when this hero was only fifteen winters old,

" He hit the mark a *hundred rod*,
" And he cauſed a Hart to die."

Progreſs to Nottingham.

But his bard doubting, perhaps, whether he had ſaid *enough* of this feat, adds,

" Some ſay hee brake ribs one or two,
" And ſome ſay hee brake three;
" The arrow within the hart would not abide
" But it glanced in two or three."

Ibid.

However in the 10th ſong the poet gives him a rival.

" Will Scadlocke he kil'd a bucke,
" And Midge he kil'd a doe;
" And Little John kil'd a hart of Greece,
" *Five hundreth foot* him fro.

Robin Hood and the Curtall Fryer.

Robin Hood admits this to have been an incomparable ſhot: for in the next verſe he declares (upon the occaſion),

Digitized by Google

occaſion), that he would ride an hundred miles to find one, who could match Little John.

The next feat of archery mentioned in the Garland, is recorded of a ſtranger; (and which indeed was not a very extraordinary one).

" Now the ſtranger he made no mickle adoe,
" But he bends and a right good bow,
" And the beſt of all the herd he ſlew,
" *Forty* good *yards* him fro."

Robin Hood and the Stranger."

For which Robinhood gives him much credit.

The laſt feat noticed in the Garland, is in the ballad of Robin Hood and Queen Katharine, in which, the bard makes Clifton *cleave* the *willow wand* at *fifteen ſcore.*

In the ſhooting match between Robin Hood and Guy of Giſborne: Robin Hood is made to *cleave* the *prick-wand* at *three ſcore rood.*(10)

To look upon theſe two laſt moſt extraordinary feats of ſkill in the long-bow in any other light, than as the produce of fancy; or, if ever performed, at the *moſt*, as the effect of chance: would be extending our faith beyond reaſon. Robin Hood and his men were, doubtleſs, excellent markſmen: hunger, we can eaſily imagine, often gave certainty to their ſhafts; and within a *reaſonable* diſtance, we may agree with Drayton, that

" Of theſe Archers brave, there was not any one,
" But he could kill a deer, his ſwifteſt ſpeed upon."

Poly-Olbion, Song 26.

Though it is probable, that they kill'd the deer chiefly by ſtealing upon them unawares, a method, which woods and foreſts greatly favour.

(10) This ſong is inſerted in Dr. Percy's *Reliques of ancient Poetry*; and is given in the *New Garland*. In the old ballad of *Adam Bell, Clym of the Clough and William of Cloudeſly*, we have an account of ſimilar *marvelous* feats in archery. *Ibid.*

The

Digitized by Google

The only feat of ſkill on record, at all ſimilar to what the Garland affords, is noticed by Drayton; for which, he does not, it is true, give us any authority; but ſince he is remarkable as a *poet* for rejecting fiction, and reſorting to fact; we may ſuppoſe that he had ground for his aſſertion. He tells us, that the old men encouraged the young, to inliſt under the banner of Henry V. on his intended expedition to France, (which was afterwards rendered famous by his great victory at Agincourt), by pointing out to them, the feats of their anceſtors at the battles of Creſſy and Poictiers: and makes a father addreſs his ſon, thus,

" And boy, quoth he, I've heard thy Grandſire ſay,
" That once he did an Engliſh archer ſee,
" Who ſhooting at a French *twelve ſcore* away,
" Quite through the body *ſtuck him to a tree.*

Bat. of Agincourt.

Suppoſing this ſhot to have been a *chance* one, we do not ſee any reaſon whatever to impeach it upon the ground of impoſſibility. Indeed, we muſt go ſo far as to admit, that an expert archer might have performed the feat by *deſign*. The diſtance was certainly within the compaſs of the bow; as the ſtatute of 33 Hen. VIII. forbids any perſon above the age of twenty-four, to ſhoot at any mark of *eleven ſcore* yards or *under*, with any prick-ſhaft or flight arrow; which is ſufficient evidence, that twelve ſcore yards was not an *uncommon* diſtance for the range of an arrow; and the force of a ſheaf arrow from a ſtrong bow, would, at that diſtance, pierce many parts of the body through and through. If we credit Shakſpeare, whoſe veracity and accuracy have ſeldom been called in queſtion, we have a corroborating teſtimony of the probability of this remarkable fact; for in ſpeaking of a *good* archer, he obſerves that, " he would clap in the *clout* at *twelve ſcore*, and " carry a forehand ſhaft *a fourteen and fourteen and an* " *half.*" *Second part of King H. IV. act* 3, *ſcene* 2.

Mr.

Digitized by Google

Mr. Moſeley has quoted from Giraldus Cambrenſis, three inſtances of extraordinary feats in archery, performed by Welch bow-men, about the time of Hen. II. The one, that during a ſiege, it happened, that two ſoldiers running in haſte towards a tower, ſituated at a little diſtance from them, were attacked with a number of arrows from the Welch; which being ſhot with prodigious violence, ſome penetrated through the oak doors of a portal, although they were of the breadth of *four fingers in thickneſs*. And that the heads of theſe arrows were afterwards driven out, and preſerved, in order to continue the remembrance of ſuch extraordinary force in ſhooting with the bow.

The other two happened alſo in a battle, at the time of William de Breuſa, as he himſelf relates. A Welchman, having directed an arrow at an horſe-ſoldier of his, who was clad in armour, and had his leathern coat under it; the arrow, beſides piercing the man through the hip, ſtruck alſo through the ſaddle, and mortally wounded the horſe on which he ſat. Another Welch ſoldier, having ſhot an arrow at one of his horſemen, who was covered with ſtrong armour, in the ſame manner as the before mentioned perſon, the ſhaft penetrated through his hip and fixed in the ſaddle: but what is moſt remarkable is, that as the horſeman drew his bridle aſide in order to turn round, he received another in his hip on the oppoſite ſide, which paſſing through it, he was firmly faſtened to the ſaddle on both ſides. (11) Mr. Moſeley has alſo mentioned ſome

(11) The Welch hiſtorian adds, "that the bows, with which "the Welch atchieved ſuch exploits, were not made of horn, "of white wood, or yew; *ſolum ex ulmellis ſilveſtribus*; they were "neither handſome nor poliſhed, but rude and miſſhapen; yet "were they ſtiff and ſtrong; not ſo well calculated to caſt far, as "to

ſome ſupriſing inſtances of ſkill, in the uſe of the bow, exhibited by Perſian archers, (noticed by Chardin and Tavernier in their Travels). *Moſeley*, p. 325. To which we may add an obſervation of Sir Thomas Herbert's: "at this day (ſays he) a Perſian is of little repute in "archery, unleſs he can in full career, cleave an orange, "which hangs in a ſtring athwart the hippodrome; "(and when paſt the mark) with another ready arrow "can ſtrike the reſt, turning in his ſhort ſtirrups and "morocco ſaddle) backwards." *Travels into Perſia, Indoſtan, and the Eaſt. Deſcription of the Perſian Monarchy and other parts of Aſia.*

Modern archery has, indeed, nothing to boaſt of, ſimilar to the before noticed feats reported of Robin Hood and his men. However, there are now living, many very ſkillful bowmen, who would not have diſgraced the corps of Sherwood Rovers. Of the various ſocieties of modern archers, no one has, upon all occaſions, ſignalized itſelf more, than that of the Toxophilites, who, at the grand meeting of the ſocieties of archers of England, (on the 27th of May, 1791, at Blackheath) bore off the beſt prize. Among its members, it can boaſt of one,* who, ſhooting two arrows at each end, has put *twenty ſucceſſive* arrows into a four-foot target, at one hundred yards; and *twelve* arrows into the compaſs of *two feet* at *forty-ſix* yards, (within the ſpace of

"to give a weighty blow." *Itiner. Cambr.* c. 3. p. 835. Mr. Warrington in his *Hiſtory of Wales*, tranſlates the words *ulmellis ſilveſtribus*, "*ſlight twigs joined or twiſted together.*" It is difficult to conceive, that twigs *twiſted* with the niceſt art, could make a bow of any ſtrength. They would probably anſwer the purpoſe better, if laid *ſtraight* and bound together: but the word *ulmellis* ſeems capable of a more ſatisfactory interpretation, and, with ſubmiſſion to the learned in grammar and antiquity, may, I conceive, be conſtrued, with the Engliſh words, *common elm*, or *elm plants*; which will leave nothing for conjecture.

* Mr. Waring.

one.

Digitized by Google

one minute). Another *, who (ſhooting two arrows at each end) has put *ten ſucceſſive* arrows into an *eight-inch* paper at *thirty* yards; and *fifty-two* arrows (out of an hundred) into a four-foot target, at *one hundred* yards. And two † who have, at the *ſame end*, put *both* arrows into an *eight-inch* paper, at *ſix ſcore* (an hundred and twenty yards): feats, which, in all probability, Robin Hood himſelf never ſurpaſſed; and ſome perhaps will add, *probably* too never achieved (12).

The following *Target-Card* ſhews the ſhooting (in the *Toxophilite* ground) for the *Prince's* annual bugle, by thoſe who have won it in the years 1795, 1796, 1797.

ARCHERS NAMES.	Gold. 9	Red. 7	Inner white. 5	Black. 3	Outer white. 1	Number of hits.	Total value.
1795. Mr. Brady - - - - - - - -	4	17	19	24	26	90	348
1796. Mr. Crunden - - - - - - -	6	10	17	24	20	77	301
1797. Mr. Shepheard - - - - - - -	6	16	23	17	26	88	358

Double ends 42. Arrows ſhot 168.

N.B. The lengths were 60 yards, 80 yards, and 100 yards, ſhot *alternately*. The *value* of the hits in each circle is marked by the figures 9. 7. 5. 3. 1.

*Mr. Crunden. † Mr. Troward, Mr. H. Greene.

(12) Among the archers of *this* day, Mr. Anderſon muſt not be forgot; whoſe excellence in Archery has (both in this country and in Flanders) been a ſubject of admiration; and given him an indiſputable title to many prizes. He is one of thoſe, in Aſcham's words, *by nature apt for archery*; and who might well be ranked

" With Scathlock, John, or honeſt Brand
" That hath the *happy hitting hand.*"

Notes to the New Garland.

Digitized by Google

Digitized by Google

PART IV.

THE ART AND PRACTICE OF ARCHERY, INCLUDING A COMMENT UPON THE TOXOPHILUS OF ASCHAM.

Digitized by Google

Digitized by Google

CHAPTER I.

OF THE INSTRUMENTS OF ARCHERY.

ASCHAM introduces the practical part of his treatise by informing us, "that all things which "belong to shooting are outward; of which, some are "peculiarly appropriate to each individual archer: "and others are general and common to all archers; "as time and place serve."

Under the first of these divisions he enumerates,

The *Bracer*—*Shooting-Glove*—*String*—*Bow*, and *Shaft*.

Under the second;

The *Weather* and the *Mark*.

It may, perhaps, be as well to leave these heads in the order in which Ascham has placed them; and here only observe, that modern archers make use of three other instruments, which must be referred to his first division, viz.

A *Belt*—*Tassel* and *Grease-Pot*.

Digitized by Google

CHAPTER II.

OF THE BRACER.

Uſe of the Bracer—Form and Materials of the ancient Bracer—Modern Bracers.

"A BRACER, ſays Aſcham, ſerves two purpoſes: "one, to ſave the arm from the ſtroke of the "ſtring when looſed upon it, and the coat from wear- "ing; and the other, that the ſtring gliding ſharply "and quickly off the bracer, may make a ſharper "ſhoot. For if the ſtring ſhould light upon the bare "ſleeve, the ſtrength of the ſhoot would ſtop and die "there. But that it is beſt, in his judgment, to give "the bow ſo much bending, that the ſtring need never "touch the arm; and conſequently, that a bracer ſhould "become needleſs: as was practiſed by many good "archers with whom he was acquainted, and who did "not uſe any bracer. That in a bracer three things "ſhould be attended to; that it has no nails in it, that "it has no buckles, and that it be faſtened on with laces "without tags. For the nails will cut in ſunder the "ſtring, before the archer is aware of it, and ſo put "the bow in danger. Buckles and tags at unawares "will ſcratch the bow, a thing not only unſightly but "perilous, by giving birth to frets. And thus, a "bracer is only uſed that the ſtring may have a ready "paſſage."

From theſe obſervations it ſeems, that Aſcham does not

Digitized by Google

not mean to say that the bracer possesses any particular quality, whereby it can, independently, *add* any degree of *sharpness* to the shoot; but only that it has that effect; *comparatively* and when contrasted with the non-elasticity of the coat sleeve.

But in order to determine how far the bracer answers to the *second* purpose noticed by Ascham; we must first ascertain, precisely, the instant in which the arrow *quits* the *string*, after it is loosed: for if the arrow leaves the string *before* the latter touches the arm, then the bracer cannot possibly serve this *second* purpose. On the other hand, if the arrow does not quit the string till the *latter* has *touched* the bracer; then it will be a question, how far the jar, which the string receives the instant it falls upon the bracer, checks or impedes the force, or diverts the direction of the arrow. However, it is apparent, that the arrow is projected from the string, as soon as the latter reaches the point or line from which it is *drawn:* consequently, when the bow is braced *high*, or the archer, in holding it, turns his wrist somewhat *inwards*, the string can never touch the arm.

The form or material of the bracer is not noticed by Ascham. His annotator (Mr. Bennett) observes, that this account of the bracer is somewhat obscure, and that it seems to have been a kind of close sleeve laced upon the arm. And he remarks, that those who write of things well known, seldom extend their care to time in which they may be known less. This observation, although evidently not made by one acquainted with archery, may account for many of the deficiencies which are observable in the Toxophilus: yet, as archery was, at the time Ascham wrote, falling fast into decay, and he appears to have taken great pains to revive the art from its languid state; it should seem, that the circumstance

Digitized by Google

might have led him to have been the more particular in the *minutiæ* of it.

We may well ſuppoſe, that the ancient bracer was very ſimilar, in material and form, to that which is uſed at this day. The modern bracer is compoſed of a piece of ſtout leather, poliſhed on the exterior ſide. In form, it is either oval or like the half of a coat ſleeve. The colour is either black or brown. The ſize of the bracer depends upon that of the arm, and the manner of holding the bow; for good archers (who hold their bows always ſteadily and alike when they looſe the arrow) find that the ſtring generally ſtrikes nearly in the ſame place, and can therefore ſhoot with a ſmall bracer: but in ſhooting with much elevation (as at Rovers), the arm cannot be ſo well guarded by a very ſmall one. Some modern archers have made uſe of a plate of *horn* faſtened on the bracer; while others have glued ſmall pieces of *hard wood* upon woollen cloth, having the ſides oppoſed to the ſtring made round, in order that the ſtring might have the ſwifter paſſage in its return: but the leathern bracer is the moſt commonly uſed.

More might be ſaid of the bracer, but as archery yet flouriſhes, and this part of an archer's accoutrements is very ſimple and generally known, the young archer is referred to the bow-makers who ſell them.

CHAP-

Digitized by Google

CHAPTER III.

OF THE SHOOTING-GLOVE.

Uſe of the Shooting-Glove—Ancient Shooting-Glove—Modern Shooting-Gloves—Materials—Fingers uſed in drawing the String—Handle of the Bow formerly waxed—Now covered with Velvet, Shag or worſted Lace.

" A SHOOTING-GLOVE, ſays Aſcham, is " chiefly to ſave a man's fingers from being " hurt; that he may be able to bear the ſharp ſtring to " the utmoſt of his ſtrength. When a man ſhoots, " the *might* of his ſhoot lies on the *foremoſt* finger and " on the *ringman*; for the middle finger, which is the " longeſt, like a lubber ſtarts back, and bears no " weight of the ſtring in a manner at all. Therefore, " the two other fingers muſt have thicker leather, and " that muſt have thickeſt of all, whereon a man looſeth " moſt: and for ſure looſing, the foremoſt finger is moſt " apt, becauſe it holdeth beſt; and for that purpoſe " nature hath, as it were, yoked it with the thumb. " Leather, if it is next the ſkin, will ſweat, wax hard, " and chafe; therefore, *ſcarlet*, on account of its ſoftneſs " and thickneſs, is good to ſew within the glove (1).

(1) Aſcham does not, I preſume, mean that a ſcarlet *dye* communicates any peculiar degree of *ſoftneſs* to cloth; but that ſcarlet cloth, of a fine texture, was well ſuited to this purpoſe. And that *fine* cloth, of *any* colour, would anſwer equally as well.

" If

Digitized by Google

" If that is not ſufficient, but the finger is ſtill hurt;
" you muſt take a cerecloth, covered with a mixture of
" fine virgin wax and deer's ſuet, and put next your
" finger, and then put on your glove. If ſtill you feel
" your finger pinched, leave off ſhooting; both becauſe
" then you will ſhoot ill, and, by little and little hurting
" your finger, it will be long ere you will be able again
" to take up your bow. A new glove plucks many
" a ſhoot, becauſe the ſtring goes not freely off:
" and therefore the fingers muſt be cut ſhort, and
" trimmed with ſome ointment, that the ſtring may glide
" well away. Some, by holding the nock of their
" ſhaft hard, rub the ſkin off their fingers: for this
" there are two remedies; one, to have a gooſe-quill
" ſplit and ſewed againſt the nocking (betwixt the
" lining and the leather), which too will much help
" the ſhoot: the other, to have a roll of leather
" ſewed betwixt the fingers, at the ſetting on of the
" fingers, which will keep them ſo much apart, that
" they will not hold the nock ſo tight as they did.
" The ſhooting-glove has a *purſe*, which ſerves to put
" fine linen cloth and wax in; two things neceſſary to
" a ſhooter. Some men uſe gloves, or other ſuch like
" thing, on their *bow-hand*, to prevent its being chafed,
" becauſe they hold ſo hard. But that commonly
" happens when a bow is not round, but ſomewhat
" ſquare: fine wax will do very well in ſuch a caſe, to
" lay where a man holds his bow."

Thus ſpeaks Aſcham of the ſhooting-glove: but, in modern times, various inventions for guarding the *drawing fingers* from the effect of the ſtring, have been made uſe of; of which every archer uſes that one which, upon experience, he finds ſuits him beſt. The following are the moſt generally uſed: viz.

1. The

Digitized by Google

1. The *ſhooting-glove*; which conſiſts of finger-ſtalls faſtened to thongs buttoned round the wriſt; and may be uſed with or without a glove.
2. *Finger-ſtalls*; ſewed to a common glove.
3. The *tab*; which is a piece of *flat* leather, into which the fingers are let, and which lies on the *inſide* of the hand.

The beſt leather for each of the above, is what is called *horſe-butt* leather, dreſſed on that ſide which is uſed outwardly.

We may here notice, that Aſcham ſpeaks of *three* fingers being uſed in drawing the bow. Shooting with *two* fingers only is much uſed in *modern* archery; and probably was practiſed in Aſcham's time, although he has omitted to mention it. It is ſaid, by ſome very excellent archers of this day who ſhoot with only the two firſt fingers, to be the moſt ſcientific mode of ſhooting, and to inſure an eaſier and cleaner looſe, and conſequently more certainty, than ſhooting with three fingers: but in roving and ſhooting with very ſtrong bows, three fingers have, with moſt men, been deemed to poſſeſs the greater power, and accordingly are then generally uſed (2).

As to the holding the bow: wax muſt certainly unite the hand to the bow very firmly. However, for at leaſt a century paſt, the handle of the bow has been

(2) Soft and fleſhy fingers being not ſo well calculated to looſe the ſtring cleanly, without being ſometimes hurt by it; it may be found neceſſary, for thoſe who have ſuch fingers, to eaſe the two firſt by uſing the third finger with them. But when the third (or *ringman* as Aſcham terms it) is very long or ſtiff, it will be found often to hang too much on the ſtring; and therefore ſhould be uſed as little as may be. The Turks, Perſians and Moguls, who uſe the horn bow, draw with their *thumb* only.

covered

Digitized by Google

covered with velvet, ſhag, or worſted lace, which ſerves ſufficiently well to fix the bow firmly in the hand; eſpecially as moſt archers wear a glove on their bow hand.

The *Purſe* noticed by Aſcham as forming *part* of the *ſhooting-glove*, muſt ſurely have been very inconveniently placed. A waxed cloth to rub the bow and ſtring; with a ſmall file to trim the head and nock of the arrow; ſpare ſtrings, &c. generally attend an archer: but in theſe days, he would never think of putting them into his *ſhooting-glove*.

CHAP-

Digitized by Google

CHAPTER IV.

OF THE STRING.

Importance of good Strings—Whether the String ſhould be made of Hemp or Silk—Strings how made —Different Effects of thick and thin Strings— Of whipping Strings and preventing them from ſoon wearing out.

ASCHAM ſays but little of the ſtring, contenting himſelf with obſerving, "that, although appa- "rently a trifle, it is of much importance; as a bad "ſtring breaks many a good bow, and nothing half ſo "many: and that becauſe an inexperienced man "may be more eaſily deceived in the choice of his "ſtring, than of his bow; that ſtringers ſhould be "the more diligently looked after, by the proper offi- "cers."

Whether the ſtring ſhould be made of good hemp, as they were in his time, or of flax or ſilk, Aſcham leaves to the determination of the ſtringers.

It cannot be collected either from record or tradition, that any other than hempen ſtrings have been uſed for Engliſh bows. Indeed ſilk was not brought into England in any quantity till the ſixteenth century: yet a *very old* ballad (which mentions Engliſh archers) has the following line;

"Theyr ſtringes of *ſilke* ful ſure."
Adam Bell, &c. Part ii. l. 126. *Percy's Reliq. of anc. Eng. Poetry.*

If

Digitized by Google

If ſilk was uſed, the ſtring muſt either conſiſt of a number of threads bound at intervals (as thoſe uſed with the Turkiſh, Perſian, and Tartar bows, in which caſe it would be too thick for the nock of our arrows); or of raw ſilk twiſted, which probably would anſwer for this purpoſe, if the fibres were long enough, and the elaſtic quality of ſilk could be diminiſhed. The Italian hemp is obſerved to make the beſt ſtrings, being ſtronger in texture and having longer and finer threads than moſt other kinds. We may recollect, that Sir John Smith (*ante, Part* i. *Ch.* ii. *ſec.* i.) obſerves, that the ſtrings, even of ſtrong war-bows, when made of good hemp, did ſeldom break.

The ſtring is made of the longeſt threads of the hemp, twiſted very tight; and afterwards, as Sir John Smith notices, rubbed with a kind of water-glue, to preſerve it from wet. The *eye* (which is that part of the ſtring that occupies the *upper* horn of the bow) is firſt made; and is ſomewhat the thickeſt part; the other end is generally without any eye (though ſtrings have lately been made with *two* eyes, which anſwer well enough): and, when put on the lower horn, is made into a twiſted knot or nooſe, termed, and much uſed by thoſe employed in moving timber, a *timber hitch:* as the tighter it is drawn, the more ſecurely it holds.

Aſcham makes a diſtinction, which appears to be worthy of attention, between great and little (he means *thick* and *thin*) ſtrings; the *great* ſtring, ſays he, "is "more *ſafe* for the Bow, more ſure to *prick with*, "but of *ſlower caſt*: and the *little* ſtring directly the "*reverſe*; not ſo ſafe, therefore to be taken more care "of, leſt, by being long uſed, it break the bow: "more fit to ſhoot *far*, than apt to prick *near*." Therefore, when you are acquainted with the nature both of the great and ſmall ſtrings, you muſt fit your bow

bow according to the *occaſion* of your ſhooting; and (as no doubt Aſcham meant) to the *ſtrength* of your bow. For in ſhooting great diſtances, as at *rovers* and *flights*, when a longer arrow is uſed than at ſhort lengths, and the bow is much elevated, the ſtring muſt be ſtrong, to reſiſt the great tenſion and jar which it is to ſuſtain. With reſpect to the large ſtring ſhooting the *ſureſt*, it may be obſerved; that when the ſtring is ſmall, but ſtrong enough to hold the bow, the *whipping at the nocking point* may be made as thick as the nock of the arrow will admit of, by which means, the thin ſtring may, poſſibly, become more certain in the caſt.

Bow ſtrings are always *whipped* (that is wrapped) at the *nocking point*, and a little above and below it, generally the breadth of the fingers uſed in drawing, with fine twine or ſilk, firſt waxed. This whipping anſwers two purpoſes; that of filling the nock of the arrow (which ſhould always ſet rather *tight* on the ſtring) and ſaving the ſtring from wearing at that place. Some archers alſo whip the *eye* and *nooſe* of the ſtring and a little below each, adding a ſlight covering of gum or glue to the whipping, for the latter purpoſe. And in whipping, are careful, when the ſtring is ſufficiently ſtretched (for moſt new ſtrings will give a little) to whip the preciſe point on which the arrow ſhould lie, (which is called the *nocking point*) with *white* and on each ſide with *coloured* ſilk or thread, that they may always nock exactly. *Catgut* and *ſilver-wire* have, by ſome modern archers, been tried for this purpoſe: but, being harder than twine or ſilk, they have been found often to *burſt* the nock of the arrow, when that goes on tight; and catgut, unleſs firſt moiſtened, is difficult to whip on the ſtring.

The nocking part of the ſtring ſhould be waxed before it is whipped, that the whipping may hold the better:

Digitized by Google

better: and afterwards, the whole ſtring ſhould be waxed, and alſo now and then rubbed with bees-wax or white wax, (though the former is moſt generally uſed) to prevent its collecting moiſture and untwiſting: the latter inconvenience is remedied by retwiſting the ſtring at the bottom end.

After the ſtring is put on, and ſo ſtretched that it does not want altering; the eye and nooſe, if not whipped, may be ſlightly rubbed with moiſtened Indian glue, which will prevent their fraying. And the eye of the ſtring may be faſtened to the upper horn, by means of a piece of twine or ſilk, carried through a hole in the latter: which will prevent the ſtring from coming off continually at the lower horn, and thereby untwiſting. Fine glove-leather or any kind of tape or binding, wrapped round the eye of the ſtring, will preſerve it from being cut by the nock of the horn.

CHAP-

Digitized by Google

CHAPTER V.

OF THE BOW.

SECTION I.

Woods proper for Bows—Value of Yew as a Bow-wood—Superior Value of foreign Yew—New Conſtruction of the Bow—Origin of the Invention—Newly imported Bow-woods—Metal Bows.

WE now come to what Aſcham, with reaſon, terms the *chief* inſtrument of archery, the bow: though perhaps, ſtrictly and mechanically ſpeaking, the bow and arrow conſtitute but *one* complete inſtrument; of which each is but a *component* part, and uſeleſs when disjoined. The ſame obſervation, indeed, applies to the ſtring. The bow, on account of its *nature* and *importance* will, in its independent and ſevered form, deſerve a minute deſcription and attention.

After noticing various kinds of bows, uſed by different nations; Aſcham proceeds to enumerate the ſeveral kinds of *woods* proper for Engliſh bows. Among which, he obſerves, that "*Brazel* (3), elm, wych" (he

(3) This word is, perhaps, a miſprint for *hazel:* for, admitting that *Brazil*-wood was imported into England in Aſcham's time: yet, it was too brittle to make a ſelf-bow. But the former ſuppoſition ſeems the moſt ſatisfactory; as the ſtatutes on archery do not mention Braſil, but often notice *hazel* as a bow-wood. Thus, the ſtatute of the 33 H. 8. c. 9. enacts, "that every bowyer "(living without the City of London) for one bow of yew, "ſhall make four of elm, wych, *haſil*, aſh or other wood, apt "for the ſame."

Digitized by Google

means wych-elm) " and aſh, are by experience, " found to make very *indifferent* bows; and that " *yew*, (which was in his time and had long been " generally uſed by the Engliſh, and bore the beſt " price even among the Romans (4) for the purpoſe

(4) It does not appear, that during the period the Romans retained the dominion of the world, they had any other archers than what were Auxiliaries: all or moſt of which were Cretans, who, as was obſerved, uſed the Scythian bow; and we find, it was the ſort of bow, upon which they relied for victory, in the ſixth century. (*Supra*, *part* 1. *ch.* 1. *ſec.* 2.) This and the great Tartar bow ſeem to have had continuance among them long after the diviſion of the Empire. It was, no doubt, the latter, in the uſe of which the Emperor Gratian exhibited ſo much ſkill. *Gibbon*, vol. 3. p. 4. But we are told, that after the great ſlaughter of the Goths at the battle of Naiſſus (anno domini 251), a ſelect body of the Gothic youth was received among the imperial troops. *Ib.* vol. 1. p. 351. In the Reign of Conſtantine, according to Mr. Gibbon, the introduction of the barbarians into the Roman armies became more univerſal. (vol. 2. p. 48.) And we learn that the Emperor Alexius had Scandinavian guards. In a former part of theſe tracts (*part* 1. *note* 8.) an attempt is made to trace the uſe of the *wooden* bow, among the inhabitants of the north; who, there is reaſon to ſuppoſe, were acquainted with this *primeval* bow, in very early times. Upon referring to the authority, which Aſcham made uſe of when he obſerved that *yew* bore a high price, among the Romans as a bow-wood; it is evident, that he ſuffered himſelf to be miſled, and has quoted his author (Virgil) very imperfectly in the following *half* line:—" *Taxi torquentur in arcus*:" (which is the 458 line in the ſecond book of the Georgics.) For he has omitted to notice the moſt important word in the whole line, which ſtands thus: " *Ityræos* taxi torquentur in arcus." So that we find Virgil does not ſay, that the Romans uſed the bow of yew, but that the *Ituræans* did. This people (who inhabited a part of Paleſtine near Cæloſyria) were celebrated archers, and formed part of Pompey's auxiliary troops at the battle of Pharſalia. *Lucan Lib.* 7. *l.* 230. The Philiſtines, indeed, are frequently noticed in ſacred hiſtory, as men very ſkilful in the uſe of the bow. And to this ancient people, who appear to have been a very warlike nation, the *invention* of the bow and arrow has been aſcribed. *Univerſal Hiſt. (anc. part) vol.* 2. *p.* 220. The uſe of this *wooden* bow was, no doubt, extended to ſeveral of thoſe tribes which Mr. Pinkerton, in his *Diſſertation on the origin of the Scythians*, thinks proceeded weſtward, and peopled Germany, Italy,

Digitized by Google

" poſe of bow-making), was the *beſt* of all others for " a bow" (5).

The ſuperior value of *foreign* yew as a *bow-wood* is recognized by ſtatutes paſſed in the Reigns of Edward IV. and Richard III. which direct that bow ſtaves ſhall

Italy, Gaul, and the countries bordering on the Baltic. Although we do not find much to guide us in our opinion, as to the time when the Romans became acquainted with or uſed the wooden-bow; yet have we ſatisfactory evidence of their having been acquainted with its value in the fourth century. For Vegetius (a Roman General who lived in that period, and wrote his book on military affairs in the Reign of Valentinian), in treating of the different weapons proper to be uſed in the Roman army, ſpeaks of the *wooden* bow; and with a ſeeming preference in compariſon of other bows, in the following terms: " propè tertia, vel " quarta pars juniorum, quæ aptior potuerit reperiri, arcubus " *ligneis*, ſagittiſque luſoriis, ad illos ipſos ſemper exercenda palos." *Lib.* 1. *Chap.* 15.

(5) The wood of the *palm-tree* ſeems formerly to have been a favourite material for bows, among many nations. *Moſeley*, p. 51. But Aſcham obſerves, that " we had no experience of it." And, ſpeaking of the *cornus*, (of which the Lycians made their bows) ſays, " As concerning the name of it in Engliſh, I can ſooner " prove that other men call it falſe, than I can tell the right " name of it myſelf." Mr. Moſeley calls it the *cornel tree*. Aſcham adds, " it is as hard as horn, and very fit for ſhafts." Aſcham, quoting Heroditus, informs us, that the Indians made very ſtrong bows of a large *reed*. But no doubt, Heroditus alludes to the *bamboo*, of which bows are ſtill made in many parts of the Eaſt. The inhabitants of Maxadavar ſhoot arrows, from bows of this wood, a very great diſtance. *Turner's Narrative of the Embaſſy in Tibet* in the year 1783. Printed 1800. We are told, that the bows of the Laplanders, which are ſo ſtrong that the ſtouteſt Norwegian cannot bend them, are made of *fir* glued upon birch. Experiments have been tried of late years, to make a good bow with *fir*, but it totally failed to anſwer the purpoſe. Probably, if fir is uſed by the Laplanders, it is bent when it is green, and when the ſap is riſing. Mr. Curtis, in his deſcription of the uſes of the *laburnum* (*Botanical Magazine*, vol. 5. Pl. 175), adds a note, wherein he obſerves, that Matthiolus ſpeaks of the wood of *that tree*, as being particularly uſed for making the beſt kind of bows. Mr. Waring, who made the experiments, above noticed, with fir, alſo tried the effect of laburnum for this purpoſe, but with no better ſucceſs. He made ſome bows of the *ilex*, which anſwered better.

Digitized by Google

be imported from Venice; and particularly by the ſtatute of the 8 Eliz. c. 10. which regulates the price of bows, and directs that when a bow of Engliſh yew is ſold for 2s. a bow of *foreign* yew may be ſold for 6s. 8d.

From the time when archery was firſt introduced into Britain, to the days of Aſcham, we do not find, that any other bow, than that formed of *one piece* of wood, was ever uſed. Had any other been known, no doubt Aſcham would have taken notice of it, in his Toxophilus; but his ſilence upon the ſubject may afford us a reaſonable aſſurance, that, in this kingdom, no other was then uſed or known. Since the time of Aſcham, a moſt important diſcovery in archery, by means of a new method of conſtructing the bow, has been made in this country. It is an obſervation no leſs true than trite, that *neceſſity* is the mother of *invention*; and we know, by experience, that ſome of the moſt valuable diſcoveries and inventions in the arts have been owing merely to *accident*: ſo it has happened with archery. We find that, in the Reign of Queen Elizabeth, a complaint was made to government that the foreign merchants, who by an act of parliament paſſed in the twelfth year of the Reign of Edward IV. ch. 2. and a ſubſequent one in the firſt year of the reign of Richard III. ch. 11. were obliged, with every butt of Malmſey or Tyre wine, to import bow-ſtaves, (*four* by the firſt and *ten* by the laſt mentioned act) had long neglected to pay attention to theſe acts: and that, when called upon to perform the injunction laid upon them, they alledged, that the importation of bow-ſtaves had *long been diſuſed*; and that the country, from whence they were brought, was then in the hands of the Turks. *See Stow's Survey of London, vol. 2. b. 5. ch. 13.*

Digitized by Google

ch. 13 (6). As the uſe of the muſket was then gaining ground, and, indeed, ſoon afterwards entirely ſuperſeded that of the bow in *war*; we may ſuppoſe, that very few, if any, bow-ſtaves were imported after the Reign of Elizabeth:

(6) Malmſey wine was chiefly the produce of Crete, but the Venetians were in poſſeſſion of that iſland, from the middle of the twelfth or beginning of the thirteenth to the middle of the ſeventeenth century. So that, had the yew, which they had been accuſtomed to bring into England, grown in Crete, the merchants would hardly have ventured to have made a falſe allegation. Before the Portugueſe diſcovered a paſſage to India by the Cape of Good Hope, the Venetians purchaſed the commodities of the Eaſt at Alexandria and other parts of the Levant, and diſtributed them all over Europe. Hence, we may conclude, they brought the bow ſtaves from thoſe parts, and particularly from Tyre. In the Statute of 33 *H.* 8. (*c.* 9.) we find mention of *elk* yew, which Mr. Barrington ſuppoſes to mean *elb* yew; the ſtatute of the 13 *Eliz. c.* 14. reſpecting the importation of bow-ſtaves, including the merchants from the eaſt parts and the Hans Towns. And Sir John Smith obſerves, that the *Eaſterlings* had great quantities of yew. *Harl. MSS.* The Eaſterlings or Eaſterland merchants were a company of merchants called commonly, in Queen Elizabeth's time, merchants of Elbing; becauſe there they firſt ſeated themſelves. *Stow. Survey of London*, vol. 2. b. 5. c. 17. We alſo find mention of *Spaniſh* yew, of which our bows are ſometimes ſaid to have been made. Stow informs us, that the people of Caſtile purpoſely deſtroyed their woods, and provided by law that no ſuch wood ſhould be preſerved. However, againſt the reply of the merchants, it was urged, that the Italians ſhould be compelled to bring in bow-ſtaves from the *parts adjoining to Venice* and *thereabouts*; becauſe the *fineſt* and *beſt* yew came from thence. *Survey of London*, vol. 2. b. 5. ch. 13. The yew tree is a native of moſt parts of Europe; but yew of the growth of the Eaſtern countries ſeems to have been the moſt eſteemed for the purpoſe of bow-making: poſſeſſing, probably from the warmth of climate, a cleaner texture and greater elaſticity, than that which is found in colder regions. Yet, Engliſh yew, even to this day, occaſionally affords ſome very good ſelf-bow ſtaves.

The yew tree was, no doubt, during the reign of military archery in this country, much cultivated in England. Lord Lyttelton ſays, that Fitz Stephen, ſpeaking of the foreſt of Middleſex, takes notice, that it was full of *yew* trees; the growth of which was particularly encouraged in thoſe days, and for many ſucceeding ages; becauſe the wood of them was eſteemed the beſt for making bows. Vol. 3. p. 274. But it is obſervable,

 that

Digitized by Google

Elizabeth; although the long-bow ſtill continued to be uſed, as an inſtrument of *amuſement*. In all probability, archery would inſenſibly have died away, or been very languidly practiſed in this kingdom after that period; had not the bow-makers, for want of foreign yew, hit upon the following expedient (7). Finding that Engliſh yew was, in general, too full of knots to make good bows of itſelf; they tried the effect of uniting a piece of tough and ſpirited wood to the yew: the experiment exceeded their expectation, (for it brought the *inſide* of the tree into uſe), and Kelſal of Mancheſter, the oldeſt and beſt bow-maker of his time, aſſerted, that after *back'd*-bows (for ſo bows of *two* pieces were called upon this diſcovery, to diſtinguiſh them from the firſt ſort of bows, which from that time received the title of *ſelf*-bows) began to be uſed, they were

that Fitz Stephen does not particularize *yew* trees, but only ſpeaking generally of this foreſt, uſes the words, "*ſaltus nemoroſi.*" *See Fitz Stephen's Deſcript. of London with a commentary. Quarto edit.* 1772. *p.* 26. *note* 25. Indeed, it has frequently been ſuppoſed, that the old yew trees, ſometimes ſeen at this day in church yards in England, were originally planted there for the purpoſe of *archery*. But ſome have aſſigned another reaſon for their being found in ſuch places: namely, that in ancient times, the yew was, on Palm Sunday, ſubſtituted for the *Palm*. *See a Paper on this ſubject in the Gent. Mag. for the year* 1779. *vol.* 49. *p.* 578. The author of that paper mentions an *opinion*, to which he did not incline, that trees had often been planted in church yards to *defend the church from the force of the wind*. However this opinion is ſupported by the words of the ſtatute of the 35th Edw. I. (*Stat.* 2.)

(7) Whether our Engliſh artificers can fairly lay claim to *originality of invention* in this diſcovery, may admit of ſome doubt: ſince it appears, that the Laplanders, as Scheffer informs us, have, for a long period of time, conſtructed their bows of *two* pieces of wood; faſtened together with a ſtrong glue made of the ſkins of fiſh. *Scheffer. Laponica. cap.* 22. *p.* 244. This glue is, no doubt, the *iſinglaſs*, the uſe and excellent quality of which, as a glue, is well known in this country; and particularly by the bow-makers. The firſt back'd-bows, that appeared in England, were made by the Kelſals of Mancheſter, about the end of the ſixteenth century.

deemed

Digitized by Google

deemed ſo much preferable to ſelf-bows, that for one of the latter, he conſtantly made fifty of the former (8). For ſome time after this new method of conſtructing bows came into practice, yew was uſed for the belly of the bow: *fuſtic*, a wood brought from Hiſpaniola, was afterwards tried, and was found to make a much quicker bow than yew. And, of late years, the bowyers have ſelected from the different kinds of woods, imported into this country chiefly for the uſe of cabinet-makers and inlayers, ſome which make excellent bows: namely, a ſpecies of Weſt India cocoa-tree; and a wood, called by Mr. Waring, who priſes it beyond all other for backed-bows, *dark-ruby*; which almoſt rivals the fuſtic in the quickneſs of its caſt, without partaking of the brittleneſs of that wood (9).

(8) The back'd-bow is not confined to a *ſingle* back; a *double* back, or rather an intermediate ſlip of quick caſting wood, has been found to anſwer with yew exceedingly well. The art of uniting two pieces of wood, in the conſtruction of the bow, has given birth to a further experiment in archery. Bows have been made conſiſting of *four* pieces: (two of them being half-lengths and united to form the belly; the third being very ſhort, and occupying the center of that belly; and the fourth being the full length, and forming the back): and thus put together, they have been found to make a very quick ſhooting bow.

(9) Notwithſtanding the great repute, in which, according to Mr. Kelſal, back'd-bows were held, and the excellence at which the bow-makers have arrived in the conſtruction of them: yet, many excellent archers give the preference to the *ſelf-yew*-bow; particularly when made of *foreign* yew. Some remarkable fine ſtaves of foreign yew (ſaid to be of the growth of Switzerland) were imported into England, a few years ago; and which, at this day are in the higheſt eſtimation. In aſcertaining the different *merits* of the back'd-bow, and the ſelf-bow; it may be obſerved, that the former is, by ſome, thought to be more pleaſant and eaſy in drawing, particularly in the *laſt inch*, and of quicker caſt than the latter. Yet we know, by experience, that the beſt modern ſelf yew-bows have never been exceeded in *certainty* or *length* of caſt, by the beſt modern back'd-bows. In this compariſon we may remark, that the *roundneſs* of the ſelf bow ſeems to be an equivalent to the peculiar conſtruction of the back'd bow. On one account, bows made of the *hard* woods have the advantage of the yew bows; the latter being liable to *chryſal*, a circumſtance which ſcarcely ever happens to the former.

Digitized by Google

Self-bows have lately been made of *Canada yew*, *Lance-wood* and *Cocoa-tree*; and although bows of theſe woods, in general, ſtand well, and are not often liable to fret or chryſal; yet they by no means rival, even the Engliſh yew, in ſpirit and pleaſant drawing.

As to bows made of *metal*; Aſcham tells us, "that "ſcripture makes mention of *braſs* bows; and that *iron* "bows and *ſteel* bows had been of long time, and "alſo were in his time, uſed among the Turks: but "that they muſt needs be unprofitable. For if braſs, "iron, or ſteel have their own ſtrength and power, they "are far above man's ſtrength; and if they are made "equal to man's ſtrength; their power to ſhoot with "is gone."

There have been long-bows of ſteel made in this country, by way of *experiment*; ſome of which do now exiſt. One of them was, a few years ſince, tried at Lord Aylesford's Ground, in Warwickſhire: its power was computed to be about *ſixty pounds*, but it could not be uſed with eaſe or good effect (10). The uſe of ſteel-bows is attended with conſiderable danger. Some years ago, a gentleman received a ſevere bruiſe, by the breaking of one when drawn. With reſpect to the bows of the ancients, which by the poets are called

(10) In a former part of theſe Tracts (*Part I. ch.* 3, *ſec.* 3.) it has been ſuggeſted, that had the bow continued a military weapon in this country, it would, in all probability, have derived new powers, or at leaſt, thoſe which it is acknowledged to poſſeſs would have been increaſed, by means of that perfection, which philoſophy and the arts have now attained. Poſſibly, the preſent methods of working in and tempering horn and ſteel might, under the ſkill of modern artificers, lead to ſomething highly beneficial to archery; either by connecting thoſe two materials with wood, or by uſing them ſeparately and independently. The trial ſeems worthy the effort of genius: for ſhould it ſucceed, the bow might again become the ſuperior and *all-conquering* weapon of war.

golden

Digitized by Google

golden bows and *ſilver* bows; we have ſufficient reaſon to believe, that the poets, in ſpeaking of the bow, uſed thoſe words *metaphorically*. The ancient bows, particularly thoſe uſed by the eaſtern nations, were, probably, covered (as thoſe uſed by the Turks, Perſians, and inhabitants of the Eaſt are at this day) with a *lacker* of various colours, intermixed with leaf gold and ſilver. Yet poſſibly, the ends of the bows of the ancients were ſometimes finiſhed with a plate of ſilver or gold. See *Homer's Deſcription of the Bow of Pandarus. Pope's Homer. Iliad.* B. iv. l. 143.

SECTION II.

CHOICE OF THE BOW.

Rules—Defects to be avoided—Parts of Trees uſed in Bow-making—Obſervations.

IN the *choice* of a bow, Aſcham furniſhes us with the following obſervations: by way of introduction to which, he ſays, "that as a bow of yew muſt, for "ſhooting at the pricks, be made perfect, becauſe that "mark is certain, and moſt certain rules can be drawn "from it; ſo, that ſhall ſerve the purpoſe of his re-"marks."

1. "That it be *ſmall*, *long*, *heavy*, (11) and *ſtrong*; "lying *ſtraight* not winding; not damaged with "*knot-gall*, *wind-ſhake*, *wen*, *fret*, or *pinch*.

(11) It is obſervable, that the *lighteſt* woods have the *quickeſt* caſt. This obſervation applies not only to bows made of yew, but alſo to thoſe made of *other* woods; of which latter the *fuſtic*, being the lighteſt, poſſeſſes this quality of quickneſs in a ſuperior degree.

2. "The

Digitized by Google

2. " The beſt *colour* of a bow is when the back " and belly in working are much *alike* (for ſuch " oftentimes in wearing proves like virgin wax or " gold): having a fine long grain, even from one " end of the bow to the other: the *ſhort* grain, " although it ſometimes proves pretty good, is for " the moſt part *brittle*."

3. " That it have *plenty* of *wood* in the *hand*; for " if the ends of the bow are ſtiffiſh, the belly muſt " of neceſſity ſoon fret."

4. " Every bow is made either of a *plant*, of the " *bough*, or of the bole of a *tree* (12). The " *bough* is commonly very *knotty*, and full of " *pins*; *weak*, of *little ſtrength*, will ſoon *follow* " *the ſtring*, and ſeldom wears to any good " colour: yet, for children and young beginners it " may ſerve well enough. The *plant* proves fre- " quently well, if it be of a good and clean growth; " and, for the power of it, is quick enough of " caſt: it will ply and bend far before it breaks. " The *bole* of the tree is the moſt free from knot " or pin, poſſeſſing a faſt and hard wood, by rea- " ſon of its full growth: *ſtrong* and *powerful* in " the *caſt*, and beſt for a bow, if the ſtaves are " cleft even, and afterwards wrought, not *acroſs* " the wood, but as the grain and ſtraight growth " of the wood *leads*: or elſe, by all reaſon, it " muſt ſoon break, and that in many ſhivers. " This muſt be conſidered in the rough wood, " and when the bow-ſtave is firſt wrought and " ſhaped; for, in dreſſing and trimming it up for " a bow, it is too late to look to it."

(12) It is ſaid, that both the bow and the arrow ſhould be taken from the ſide of the tree which faces the *eaſt*: the grain of the wood, on *that* ſide, being the fineſt and drieſt.

To

Digitized by Google

To theſe obſervations, Aſcham adds, " that he does " not intend to meddle much with the *making* of a " bow, leſt he ſhould ſeem to enter into another man's " buſineſs: but adviſes bowyers to *ſeaſon* their ſtaves " well, and to give them the neceſſary *heatings* and " plenty of *tillerings:* and, with reſpect to the points " upon which he has touched, recommends the archer " to truſt to an honeſt bowyer to put a good bow into " his hands, ſomewhat looking himſelf to the tokens " he has pointed out: and not to ſtick for a little " more money for a *good* bow, than another would " give: for, that a *good* bow, *twice* paid for, is better " than a *bad* bow *once* broken" (13).

Theſe remarks appear to be ſo ſufficient and plain, that little need be added by way of illuſtration: but on this head, one obſervation occurs, which will, by experience, be found true; namely, that the ſmall defects (as *frets* or *ſhakes*) in a bow, particularly in one that has been much uſed, are beſt diſcovered when it is *bent*,

(13) At the time of the late revival of archery, not more than one or two bow-makers could be found; and they lived in the North of England, and had not been in much practice for many years. The family of the Kelſals of Mancheſter, (who were always reputed the beſt bow-makers in England, and whoſe bows are in great repute at this day) had followed the trade for many centuries, and was nearly extinct. Fortunately for the art, Mr. Waring, of Leiceſter Houſe, had ſtudied it under old Kelſal; and was therefore enabled to purſue his rules in the formation of the bow: an ignorance of which has rendered abortive the attempts of many modern bow-makers. Mr. Waring's own ingenuity, which was ſecured to him by patent, has greatly improved upon Kelſal's method of conſtructing the back'd-bow, by means of a very mechanical engine: the uſe of which has enabled him to give his bows a ſuperior power, elegance and effect. And in juſtice, it ſhould be obſerved, that archery is greatly indebted to him for numerous experiments in the art: and for the diſcovery, ſelection and uſe of woods, obtained with a difficulty and expence that have deterred many others from the uſe of them, which make remarkably fine and valuable bows.

and

Digitized by Google

and by looking at it attentively in the *ſunſhine*; and *paſſing* the thumb and fore-finger over it: which latter act alone, once or twice repeated, will in general detect them: ſo critically true, in this reſpect, is the ſenſation by the touch.

With reſpect to Aſcham's third Obſervation, "that "a bow ſhould have plenty of wood in the hand," it may, indeed, be added, that a bow, which has not a *prominency* in the *center*, will neither poſſeſs a *quick* nor a *far* caſt: which moſt deſirable qualities in a bow will be found to reſide chiefly in thoſe which are full in the hand, and regularly, and with nice proportion and ſymmetry, tapered to each horn.

SECTION III.

OF PROVING THE BOW.

How a good bow may be known and proved—How it is to be altered—Reaſons and Obſervations.

IN the next place, Aſcham gives us a method of *trying* and *proving* a bow, before we truſt to it: "by ſhoot-"ing in it in the fields, and *ſinking* it with *dead heavy* "ſhafts; looking where it *comes* moſt, and providing "for that place betimes, leſt it pinch and ſo fret." "When (ſays he) the bow has been thus ſhot in, and "appears to contain good ſhooting-wood; it muſt "again be taken to a ſkilful and truſty workman, to be "cut *ſhorter*, *ſcraped* and *dreſſed* fitter, and made to "come *circularly round:* and it ſhould be *whipped* at the

Digitized by Google

" the ends, but with diſcretion, leſt it ſnap in ſunder, " or elſe fret, ſooner than the archer is aware of. He " muſt alſo *lay* it *ſtraight*, if it be *caſt* or need require: " and if it be made flat, he muſt make it *round*; by " which means it will ſhoot *faſter* for *far* ſhooting, and " alſo be *ſurer* for *near* pricking."

Aſcham carries his admonition ſo far, as to ſay, " that a bow, which at the firſt buying, without any " more proof or *trimming*, is *fit* and *eaſy* to ſhoot in, " will neither be *profitable* to laſt long, nor yet *pleaſant* " to ſhoot well." And, indeed, although frequent alteration of a bow, particularly as bows are now made with great nicety, may ſometimes prove unneceſſary and injurious; yet, experience proves, that a perfect bow is not made *at once*.

With reſpect to a bow being made *round*, we muſt recollect, that Aſcham ſpeaks of a *ſelf*-bow; which, it ſeems, was made round as well at the *back* as in the belly: but back'd-bows have almoſt always a *flat* back, to prevent their *caſting*.

It was an old cuſtom to *whip* a bow at each *end*, and a little over the horn, with fine thread or ſilk: in order, as is ſuppoſed, to preſerve the glue of the horn from being affected by wet, which might unſolve it. But this practice is now not known; and, if good glue is uſed in fixing the horn, and the bow is not kept in a *damp* place, it ſeems quite unneceſſary for that purpoſe.

SECTION

Digitized by Google

SECTION IV.

OF THE HANDLE.

Position of the Handle—Difference of Opinion on this Head—Observations.

IT has been mentioned, that, in Aſcham's time, the middle of the bow was *waxed*, in order to fix it firmly in the hand; and, that of late years, a covering of velvet, ſhag, or worſted lace, had been uſed inſtead of wax. The only point of importance, reſpecting the handle of the bow, is the *poſition* of it, which Aſcham has not noticed. The Engliſh bow-makers have, generally, placed the *upper* part of the handle from an *inch* to an *inch and a quarter above* the exact *center* of the bow; which of courſe makes the lower limb ſo much longer. The reaſon for thus placing the handle is, they alledge, in order to make *both* limbs act *equally*: the preſſure, particularly when three fingers are uſed in drawing, being moſt on the *lower* limb: but the bow-makers in Flanders, who make no other than ſelf-bows, on this account make the lower limb the *ſtrongeſt*; and place the *upper* part of the handle *preciſely* in the *center* of the bow; inſiſting, that an arrow is beſt caſt from the *center:* while the Engliſh bow-maker contends, that when the lower limb is the *ſtrongeſt*, it muſt of neceſſity be the firſt *at home*; and conſequently, that as both limbs cannot in that caſe act equally, they cannot *caſt* equally. This difference, in the poſition of the handle, has

has been the ſubject of much diſcuſſion among modern archers. Some of them take the medium, placing the upper part of the handle from one half to *three quarters* of an inch above the center: while others adopt the Flemiſh cuſtom. Indeed, it ſhould ſeem, that as the *point* on the *ſtring* from which we draw, muſt always form a *central* point; the placing the center of the bow *out* of that line, muſt (by creating *two* centers of action, unleſs the bow is conſtructed with very great nicety to meet this principle,) cauſe an *erroneous* effect. Conſideration too, muſt ſometimes be paid, to the different manner in which men *hold* their bows, and make the *fulcrum*: ſome making it high, others low, and others in the center of the hand.

SECTION V.

OF THE HORNS.

Roundneſs to be obſerved in forming the Nock of the Horns—Method of placing the Nocks of the Horns formerly uſed in Scotland—Ornaments for the upper Horn.

ASCHAM has ſaid no more on this head, than "that the nock in the horn ſhould be made *round*, "to prevent its cutting the ſtring."

In forming the nock, there was, formerly, ſome difference between the Engliſh and Scotch methods. The old Scotch bowyers, even to the middle or cloſe of the laſt century, made the nock of the upper horn on the

Digitized by Google

the *upper* or *bow-hand* ſide, and that of the lower horn on the *under* or *ſhaft-hand* ſide only; in order, as it is ſaid, that the arrow might go cleaner and more freely from the bow. The Engliſh bowyers, diſregarding this method as of no particular advantage, have always made the center of both nocks preciſely in the *center* of the back of both horns, bringing each nock *equally round* towards the belly of the bow.

The upper horn of the bow may be ſhaped to a very pleaſing and picturesque figure, in imitation of the head of ſome animal. This practice is very ancient. (See *engravings of the Saxon and Dacian bows in Moſeley*, Pl. i.) The head of the Aries (or battering ram) of the ancients, ſo much admired in ſculpture, cannot fail to afford a deſirable ornament to the bow. The horns of the Flemiſh bows are often thus ornamented.

SECTION VI.

LENGTH OF THE BOW.

Mr. Barrington's Obſervations reſpecting the ſtandard Length of the Bow conſidered—His Errors on this Head pointed out—Statute of 5 *Edward IV. cited —Remarks on that Statute—Obſervations on the proper length of the Bow.*

ASCHAM has omitted to inform us what was the proper *ſtandard length* for the bow. He firſt directs us to chooſe it *long:* and, after proving it, to have it cut *ſhorter*; but *how ſhort* he does not mention.

Mr.

Digitized by Google

Mr. Barrington tells us, that the regulation of the Iriſh ſtatute of Edward IV. viz. "That the bow ſhall "not *exceed the height of the man*, is allowed by ar- "chers, to have been *well conſidered:* and as the arrow "ſhould be *half* the length of the bow, this would "give an arrow of a yard in length to thoſe only, "who were ſix feet high." In peruſing this obſerva- tion of Mr. Barrington's, it muſt occur, notwithſtand- ing we ſhall find it received as good authority by Mr. Moſeley, and other late writers on archery, that it is by no means ſatisfactory: for it gives to a bow of *five feet ſix inches*, the common height of a man, an arrow of *two feet nine inches*; which, ſurely no *archer* ever thought of attempting to draw to the *head* in a bow of only *twice* its length. Unfortunately for Mr. Barring- ton, his Tract on Archery is, throughout, replete with errors. Upon referring to the ſtatute in queſtion, (which is the 5 Edward IV. c. 4.) we ſhall find it penned in the following words; viz. "that every Engliſhman, "and Iriſhman that dwell with Engliſhman, and ſpeak "Engliſh, that be betwixt ſixteen and ſixty in age, "ſhall have an Engliſh bow of his own length, *and* "*one fiſtmele at the leaſt betwixt the necks*;" [ſometimes in old MSS. ſpelt *nicks* and fiſtmele called *handful*] "with twelve ſhafts of the length of *three quarters of* "*the ſtandard*." Had Mr. Barrington conſulted this ſtatute, he would, ſurely, have deemed the words par- ticularized too important to be paſſed over unnoticed; and muſt have ſeen the error of his own opinions, or of the opinions of thoſe from whom he borrowed upon this occaſion. We cannot eſtimate the breadth of an ordinary man's fiſt at leſs than four inches: but the ſtatute adds "*at the leaſt*," ſo that, according to this ſtatute, the bow for a man *five feet ſix inches* high, was to be nearly if not quite *ſix feet* be-

Digitized by Google

twixt the *nocks*. In the preſent ſtate of archery, when the length of the arrow does not often exceed twenty-nine inches; we ſeldom uſe bows, longer than five feet ten inches; more frequently thoſe which are an inch, and, generally, thoſe which are two inches ſhorter. But, circumſtances conſidered, five feet nine inches ſeems to be a very fit length for a bow; when the arrow is not ſhorter than twenty-ſeven, or longer than twenty-nine, or, at the *moſt*, thirty inches. It is indeed, ſaid, that a bow of *five feet eight inches* (or two inches ſhorter if the bow will ſtand) will caſt an arrow, of the length of twenty-ſeven inches, *further* than a longer bow will caſt the ſame or a longer arrow.

CHAP.

Digitized by Google

CHAPTER VI.

OF ARROWS. (14)

SECTION I.

Different parts of a Shaft—Woods proper for Steles—Rules to be obſerved in making Steles—Woods proper for War-Arrows—Woods uſed for Steles in modern Archery—Their different Qualities.

"A SHAFT," ſays Aſcham, "hath *three* principal "parts, the *ſtele*, the *feather*, and the *head*; of "which each muſt be ſeverally ſpoken of."

(14) Arrows have been uſed for various purpoſes. Mr. Moſeley has enumerated ſeveral uſes, to which the arrow was applied by the ancients; as *divination*, *foothſaying*, and by way of *communication* and *ſignal*. Pliny gives us the following account of a moſt extraordinary power, which the ancients aſcribed to them. "Sagittas "corpore eductas, ſi terram non attigerint, ſubjectas cubantibus, "amatorium eſſe, Orpheus et Archelaus ſcribunt? *Hiſt. Mundi.* Lib. xxviii. cap. 4. A not unſimilar and magical power was aſſigned to arrows, by the bigots in this country, in the reign of Queen Mary. Scot. in his *Diſcovery of Witchcraft*, mentions *inchanted archers*; particularly a poor fellow at Malling, in Kent, who by one of Queen Mary's juſtices was puniſhed, for ſhooting with flies or familiars, or *enchanted arrows*, becauſe he could win two or three ſhillings a day at the butts.

Mr. Moſeley has given us an ingenious method of firing a gun, by the diſcharge of an arrow. *Moſeley*, p. 209.

Digitized by Google

" Steles are made of various woods: as

" Braſil.	" Birch.	" Black-thorn.
" Turkey-wood.	" Aſh.	" Beech.
" Fuſtic.	" Oak.	" Elder.
" Sugar-cheſt.	" Service-tree.	" Aſp.
" Hornbeam.	" Alder.	" Sallow." (15)

" Theſe woods, as they are moſt commonly uſed, ſo " they are the moſt fit to be uſed; yet ſome one fitter " than another, for different men's ſhooting; as ſhall be " told afterwards."

" A ſtele muſt be well ſeaſoned, to prevent its " caſting; and ſhould be made as the grain lies, and " as it grows, or it will never fly clean. A knotty " ſteel may be ſuffered in a large ſhaft, but is not fit " for a ſmall one; both becauſe it will never fly far, " and is ever in danger of breaking. It does not fly " far, becauſe the ſtrength of the ſhoot is hindered " and ſtopped at the knot: as a ſtone caſt into an even " ſtill water, will make the water move a great ſpace; " yet if there is any whirpool in the water, the moving " ceaſes when it comes to the whirlpool: which is " not unlike a knot in a ſhaft, if it is conſidered well. " So every thing, the plainer and ſtraighter it is in its " *own nature*, the fitter it is for moving *far*. There- " fore, a ſtele which is *hard* to ſtand in a bow, without " knot and ſtraight, (I mean not *artificially* ſtrait as

(15) Among the Eaſtern nations, a ſtiff reed or bamboo was formerly the moſt uſed for arrows; which induced Pliny to obſerve, that the *reed* had conquered *half* the world. (See *ante*, part 1. note 58.) The Cornel tree was not much leſs celebrated for this ſervice. *Aſcham.* The ancient Scythians uſed deal. *Moſeley*, p. 117. Among the Turks, deal is much uſed for arrows at this day. The Indian reed or bamboo does not anſwer for our bows, being knotty and ſeldom ſtrait; and, indeed, being of equal thickneſs, it has not ſubſtance enough in the cheſt to *ſtand* (to uſe the archers term) in the Engliſh bow.

" a F

Digitized by Google

" a Fletcher makes it, but *naturally* ſtraight as it *grows*,)
" is the beſt to make a ſhaft of; either to go clean,
" fly far, or ſtand ſurely in any weather (16).

" Now, how large, how ſmall, how heavy, how
" light, how long, how ſhort, a ſhaft ſhould be, (par-
" ticularly for every man, ſeeing we muſt talk of the
" *general* nature of ſhooting,) can not be told; any
" more than a rhetorician can appoint any one ſet of
" words or figures, fit for every matter: but even as
" the man and matter requireth, ſo the fitteſt is to be
" uſed. Therefore, as concerning theſe contrarieties in
" a ſhaft, every man muſt avoid them, and draw to
" the *mean* of them; which mean is beſt in all things."

(16) Aſcham, probably, alludes to the method uſed by the Fletchers, of making the wood ſtraight, by means of *heat*, termed by them *ſetting*. The ſtraightneſs of an arrow is a very eſſential point, in its proper formation; and may be aſcertained by twirling the arrow over the thumb nail: if it ſpins ſmoothly, it is ſtraight, if otherwiſe, not. This method ſeldom fails to afford a true criterion of its value and merits for flight. An eminent writer on gunnery (Robins) has given us the following curious and philoſophical account of the aberration of a *crooked* arrow. " If (ſays he) a bent arrow, with its wings not placed in ſome " degree in a ſpiral poſition, ſo as to make it revolve round its " axis as it flies through the air, were ſhot at a mark with a true " direction, it would conſtantly deviate from it, in conſequence " of being preſſed to one ſide by the convex part oppoſing the " air obliquely. Let us now ſuppoſe this deflection in a flight " of an hundred yards to be equal to ten yards. Now, if the " ſame bent arrow were made to revolve round its axis once " every two yards of its flight, its greateſt deviation would take " place when it had proceeded only one yard, or made half a revo- " lution: ſince, at the end of the next half revolution, it would " again return to the ſame direction, it had at firſt; the convex " ſide of the arrow having been once in oppoſite poſitions. In " this manner it would proceed during the whole courſe of its " flight, conſtantly returning to the true path at the end of every " two yards; and, when it reached the mark, the greateſt deflec- " tion to either ſide that could happen, would be equal to what it " makes in proceeding one yard, equal to $\frac{1}{100}$th part of the for- " mer, or 3. 6 inches, a very ſmall deflection when compared " with the former one." *New Principles of Gunnery*, 1742.

Digitized by Google

" Yet if a man happens to err, in any of the ex-
" tremes; it is better to err in want and ſcantineſs, than
" in too great exceſs. As it is better to have a ſhaft
" a little *too ſhort*, than *over long*; ſomewhat *too light*,
" than *over-heavy*; a little *too ſmall*, than *a great deal*
" *too big*. And to err in theſe contraries cometh
" much, if men do not attend to the *ſort* of wood
" whereof the ſhaft is made: for, ſome wood is *proper*
" for this *exceſs*, ſome for this *ſcantineſs*, and ſome for
" the *mean:* as *Braſil*, *Turkey-wood*, *fuſtic*, *ſugar-cheſt*,
" and *ſuch like*, make *dead*, *heavy*, *lumpiſh*, *hobling ſhafts*.
" Again, *alder*, *black-thorn*, *ſervice-tree*, *beech*, *elder*, *aſp*,
" and *ſallow*, (either on account of their weakneſs or
" lightneſs) make *hollow*, *ſtarting*, *ſcudding*, *gadding*
" ſhafts. But, *birch*, *hornbeam*, *ſome ſorts of oak*, and
" *ſome ſorts of aſh*, being both ſtrong enough to ſtand
" in a bow, and alſo light enough to fly far, are beſt
" for a *mean*. And although I know, that ſome men
" ſhoot ſo ſtrong, that the *dead* woods are *light* enough
" for them; and others ſo weak, that the *looſe* woods
" are *heavy* enough for them; yet, generally ſpeaking,
" for the moſt part of men, the mean is the beſt.
" Thus, no wood *of its own nature* is either too light,
" or too heavy; but as the ſhooter himſelf makes it
" comparatively ſo. For, that ſhaft which, one year, is
" too light and ſcudding for a man; for the ſame rea-
" ſon, the *next* year, may chance to be heavy and hob-
" ling. Therefore, I cannot expreſs, except generally,
" what is the beſt wood for a ſhaft; but let every man,
" when he knows his own ſtrength and the nature of
" every wood, provide and fit himſelf accordingly.
" Yet, as concerning *ſheaf-arrows* for *war*; as I ſup-
" poſe, it were better to make them of good *aſh*, and
" *not* of *aſp*, as they are now a days. For of all other
" woods, that ever I proved, *aſh*, being big, is *ſwifteſt*,
" and

Digitized by Google

" and again *heavy* to give a great ſtroke; which *aſp* " will *not* do. What heavineſs doth in a ſtroke, every " man by experience can tell: therefore, aſh, being " both ſwifter and heavier, is more fit for ſheaf arrows, " than aſp" (17).

Thus far ſpeaks Aſcham on the woods proper for ſhafts. In modern archery, only *five* kinds of woods are commonly uſed for arrows: *four light*, viz. *deal*, *aſp*, *arbele* and a ſpecies of *light* wood, (probably *poplar*) brought from Flanders: and *two heavy*, viz. *lime*, and *Jamaica lance-wood*. Of the firſt kind, the Flemiſh arrows are in great repute: it is ſaid, they are made of that part of the tree which faces the *eaſt*, being conſequently the *drieſt*. Deal (that is the *yellow* or *red* deal with the turpentine in it) makes a very good arrow, but is apt to wear and ſplinter. Aſp being lighter than this kind of deal, is the more uſed of the two. The arbele, in appearance and quality, ſo nearly reſembles the aſp, that ſcarce any difference is perceivable in theſe two woods: however, the aſp is the *ſtiffeſt*, and the arbele the moſt *ſpongy*. *Lime* is an excellent wood for arrows: but unleſs highly dried, in which caſe it becomes brittle, it is ſomewhat too heavy for many bows, when uſed at the *target*. It makes a very good *roving* arrow; as does *lance-wood*, which, being much heavier, is ſeldom uſed for any other kind of ſhooting. Flight arrows are generally made of deal, aſp or light lime, footed with lance-wood, or other hard wood. But, for *very ſmall* and *light* flights, deal ſeems to be the moſt eligible; as, being the ſtiffeſt wood, it ſtands beſt in the bow.

(17) Aſp, being a very light wood, is certainly not ſo well adapted for *war* arrows. Arrows have, in modern days, been made of aſh: but they were very indifferent and by no means equal to thoſe made of lime; which for *war*, ſeems greatly preferable to aſh.

Digitized by Google

SECTION II.

OF WEIGHING AND PAIRING ARROWS.

Arrows weighed and paired in former Times—Now weighed by Troy-weight—Advantages of this Method—Scale of Weight for Arrows uſed in different kinds of Shooting—Conſequence of Shooting with Arrows of unequal Weights.

ASCHAM is ſilent reſpecting the *weight* of arrows: yet, the practice of weighing each arrow *individually*, againſt a certain *ſtandard* weight, ſeems to have been very ancient: the cuſtom or by-law of the city of London (noticed in *Part* 3, *note* 9) making mention of a *pound* arrow. It is ſaid, that old Kelſal, of Mancheſter, only *paired* his arrows; weighing one againſt another by means of a double loop at each end of a ſtick, which was made the beam of a balance. That our anceſtors paid conſiderable attention, not only to the weight, but alſo to the *merits* of each arrow, (which could only be aſcertained by a careful trial) we may collect from the following authorities:

" Their arrows *finely pair'd*, for timber, and for feather,
" With birch and brazil piec'd, to fly in any weather."
Drayt. Poly-Olb. *Song* 26.

" And Clifton with a *bearing* arrow,
" Hee clave the willow wand." (18)
Robin Hood and Queen Catherine. *Garland.*

Arrows

(18) The inhabitants of ſome other parts of the world, where archery is ſtill in uſe, pay a ſimilar attention to the *merits* of their arrows. Captain Turner (ſpeaking of the inhabitants of Buxadewa

Digitized by Google

Arrows are now weighed with the ſame weights as ſtandard ſilver, and marked accordingly: ſo that an arrow equal to five ſhillings troy or ſilver-weight, is called an arrow of *five ſhillings*. This method is attended with many advantages: among others, it enables us to pair arrows to a very great nicety, and to determine inſtantly, what arrow we ſhall uſe for any *bow* and any *length*. By this means too, a cloſer connection is made between the *light* and *heavy* woods.

It may be proper to notice here the different weights, according to which arrows are uſually made, for the various diſtances and kinds of ſhooting; obſerving, that, in *archery*, diſtance is meaſured by *yards* or (as ſeems to have been the moſt ancient practice) by *roods*, the rood conſiſting of ſeven yards and an half, *north country meaſure:* and, that diſtance is termed *length*.

THE SCALE.

Lengths.			*Weight of Arrows.*				
			s.	d.		s.	d.
4 Roods	(30 yards)	from about	4	0	to	6	0
8 ditto	(60 ditto)	ditto	3	6	to	5	6
12 ditto	(90 ditto) }	ditto	3	0	to	4	6
16 ditto	(120 ditto) }						

Roving arrows are much *heavier*, and *flight* arrows much *lighter*, than others; the former generally weighing from *five* ſhillings to *ten* and even *twelve* ſhillings; and the latter ſeldom *exceeding four* ſhillings. Yet, the above noticed weights are by no means *arbitrary*; but, as Aſcham has juſtly obſerved, " every man muſt uſe

dewar in Tibet) informs us, that Guap the father of the preſent Lama, has arrows famed for their remote and ſteady flight; which have names inſcribed on each of them, and places aſſigned to them in a quiver in ſeparate cells. *Account of an Embaſſy to the court of the Teſhoo Lama, in Tibet, in the year* 1783. (Printed 1800.)

" ſuch

Digitized by Google

" ſuch an arrow as moſt *ſuits* him, and is beſt adapted " to the *nature* and *power* of his bow." In another reſpect, the weight of an arrow is an object of attention: for, if an archer, after ſhooting for ſome time (particularly at butt or target diſtance) with two arrows of *equal* weight, changes one of them for another of much *greater* or much *leſs* weight; he will, if he looſes equally, immediately find, that the *heavier* arrow of the two will fall *ſhort* of, and the *lighter* one fly *over* the mark: and that it will require ſome little practice and ſkill, to keep both to the mark; eſpecially if that is at any diſtance. On which account, in *archery*, *three* arrows are called a *pair*; that, if one is broke, loſt, or injured, the archer may have two (the number uſed at a time) left of equal weight.

SECTION III.

LENGTH OF THE ARROW.

Length of the Arrow not noticed by Aſcham—Opinion reſpecting the Length of the Arrow compared with that of the Bow—Length of Flemiſh Arrows—Reaſons—Length of Arrows uſed in diſtant Shooting.

NEITHER does Aſcham notice the *length* of the arrow. It has long been a received opinion among archers, that, when the bow is of the length of *five feet eight inches* from nock to nock, the beſt length for the arrow, if uſed at *leſs* than *roving* diſtances, is *twenty-ſeven inches* including the *pile*: and it may here be

Digitized by Google

be obſerved, that, in ſpeaking of the length of arrows in general, the *pile* is *included* in the meaſure. Conformably with this opinion, arrows have, for many years paſt, been made in England. The Flemiſh arrows are *one inch* longer, probably on account of their bows, which are ſelf-bows, being, in general, longer than our backed bows; and, conſequently, *following the ſtring* more. In roving and ſhooting great lengths, we generally uſe a twenty-eight, ſometimes a twenty-nine, and even a thirty inch arrow. For, when the bow, in ſhooting, is much elevated, the archer finds the range and power of his drawing arm much increaſed.

We frequently find mention of a *ſtandard* arrow: (See *Remembrance of a Shooting*, (*anno* 1583) *by W. M. in Wood's Bowman's Glory. Stow's Survey of London*, (1598) p. 77. *Robin Hood's Garland.)* This, no doubt, was the ſheaf or war-arrow, made after a certain ſcale or pattern, long preſerved in the exchequer, but alſo long loſt and forgotten. Among the numerous manuſcripts in the Cotton and Harleian collections, relating to orders in war, I have not been able to find one which affords any deſcription or account of the *ſtandard* arrow. Moſt of thoſe orders (particularly thoſe iſſued in the reign of Edward III.) direct a certain number of arrows [*competentes*] to be made, without any injunction reſpecting their length or ſize. In the old ballad of Chevy Chace and in the Garland, we read of arrows being uſed, ſome of which were a *cloth yard* and others an *ell* long. Aſcham tells us, "that, at the battle of Agincourt, the army of Hen. V. "conſiſted of ſuch archers (as the Chronicle ſays) that "moſt part of them drew a yard." Clement Edmonds ſays, that in the reign of Henry V. the Engliſh bowmen did *commonly* ſhoot an arrow of a yard long *beſide* the head. Similar facts are mentioned of the Corniſh Rebels

Digitized by Google

Rebels in the time of Henry VII. by Hollinſhed. *Chron.* p. 782; by Lord Bacon, in his *Life of that Monarch*; and by Carew, in his *Survey of Cornwall*, and other hiſtorians. Yet ſome men, in theſe days, have doubted the truth of ſuch reports: while others admit the facts, but contend that the cloth yard was, at the time ſpoken of, only *thirty* inches. An accurate attention to this ſubject will convince us, that there ſeems to be very little ground to diſpute the veracity of ſuch authorities.

The ſtatute of the Staple, made in the 27th year of Edward III. (c. 10.) Enacts, "that there ſhall be but "one weight, meaſure and *yard* throughout the realm." And the ſtatute of the 18 Henry VI. c. 16. declares, "that there ſhall be but one meaſure of *cloth* through "the realm, by the *yard and the inch*, and not by the "yard and handful, according to the London meaſure." And, by a ſubſequent ſtatute (4 Edw. IV. c. 1.) broad cloth was to be meaſured by the *yard and inch* containing the breadth of a man's thumb. To carry this part of the ſubject ſtill further, it may be noticed, that among the Cotton MSS. (marked *Claudius*, D. 2.) is a very ancient ſtatute (which will be found in the Appendix to Runnington's Statutes at large, p. 27) without any date, intituled "Compoſitio ulnarum et perticarum:" in which it is declared, "*tres pedes faciunt ulnam.*" After various ſearches among ancient manuſcripts, for the purpoſe of aſcertaining the truth of the facts in queſtion, I have been able to find only the following one, which applies to the inveſtigation; and which will, I apprehend, be deemed of ſufficient authority to ſatisfy all doubt upon the occaſion. It is an extract from a MSS. intituled "*Affairs from Public Records. Defence of the* "*State in the time of King Edward III. both by Sea and* "*Land, gathered out of the Records by Robert Cotton.*"

"9th

Digitized by Google

" 9th Year of the Reign. " 2 Octob. Rex mandavit maiori et " vicecomitibus comitatis illius, emi " et p'videre faciant CCC arcus bonos " et ſufficientes, ac cordas ad eos com- " petentes: nec non quatuor dolia ſa- " gittaru' longitudinis *unius ulne*, de " bono et ſicco maeremio; ac capita " pro ſagittis illis bene acerata, et " *falas** largas habentia. Et quod pre- " dict' arcus &c. libe'nt'r conſtabu- " lar' Turris Lond', vel eius locu' " tenenti per indentur'. m. 10.

Muſ. Brit. Bibl. Cott. Julius, c. 4. *Plut.* 2 F.

It is true, that only *very long* bows would carry ſo long an arrow; and that only *very long armed* men could draw it to the head. So that this length could not be a general ſtandard for the army, but only for the talleſt archers. And Sir John Smith tells us, that, in his time, it was the uſual practice for the ſoldiers to chuſe their firſt ſheaf of arrows, and to cut thoſe ſhorter, which they found too long for their uſe. *Anſwer to Mr. Barwick.* The ſtatute of the 5 of Edward IV. (ſee *ante*, p. 145) directs the arrow to be " *three quarters of the* " *ſtandard.*" If this ſtatute means three quarters of the *Engliſh ell*, then the arrow would be of the length of thirty-three inches and three-quarters: but if it refers to the *Engliſh yard*; then, the arrow would be exactly twenty-ſeven inches. In all probability, the ſtatute refers to this latter meaſure, in which the pile or head of the arrow is included: as the arrows uſed in England and Scotland have time out of mind, uniformly been twenty-ſeven inches, including

* Probably *alas*.

the

Digitized by Google

the pile. An ancient Engliſh arrow is now a very great rarity. Mr. Waring is in poſſeſſion of a number of arrows, made preciſely after an ancient barbed ſheaf or war arrow, which he procured; and which appears from the ſhape of the head, to have been in uſe when armour was worn. They are two feet four inches long, from the nock to the point of the head; (the latter being two inches), are made taper-ſhaped, and weigh about ſeven ſhillings. In the Leverian Muſeum is an *iron* arrow, twenty-nine inches long (including the head) and barbed, which was dug up, ſome few years ſince, near the ruins of Harwood Caſtle in Yorkſhire. To follow conjecture reſpecting its uſe; it may, from its durable quality, have been kept as a *ſtandard* arrow for the North of England.

SECTION IV.

FORMS OF ARROWS.

Different forms of Steles ſuited to different Shooters—Reaſons and Obſervations——Principles of Arts drawn from Obſervations on the Wiſdom of Providence in the Formation of Animals.

" AGAIN," ſays Aſcham, " as no wood can be entirely fit for *all* ſorts of ſhafts; ſo cannot one " *ſhape* of the ſtele be fit for *every* ſhooter. For thoſe " which are ſmall breaſted, and large towards the head, " (called by their likeneſs *taper-faſhion*, *ruſh-grown*, " and by ſome merry fellows *bob-tails*,) are fit for thoſe " who ſhoot *underhand*: becauſe they ſhoot with a *ſoft* " looſe,

Digitized by Google

" looſe, and force not a ſhaft much in the breaſt, " where the weight of the bow lies; as may be per- " ceived by the wearing of every ſhaft. Again, the " *large breaſted* ſhaft is fit him, who ſhoots right *before* " him; or elſe the breaſt, being weak, would never ſtand " that ſtrong powerful kind of ſhooting. Thus, the " *underhand* muſt have a *ſmall* breaſt, to go clean away " out of the bow; and the *forehand* muſt have a *large* " breaſt, to bear the great power of the bow. The " ſhaft muſt be made *round*, nothing flat; without gall " or wen, for this purpoſe. Becauſe, roundneſs, whe- " ther you take example in heaven or in earth, is the " fitteſt ſhape and form for quick motion; and for the " ſoon piercing any thing: and therefore, Ariſtotle ſays, " that nature has made the rain round, that it might " the more eaſily enter through the air."

In illuſtration of this remark of Aſcham's, we may notice how often the principles of human arts are derived from our obſervations upon the wiſdom of Providence, in the formation of animals, and in the various gifts and inſtincts which are beſtowed upon them. We may, as the poet ſays, " *learn of the little Nautilus* " *to ſail*," and " *of the Bee to build the vaulted dome*:" and draw, with ſucceſs, our rules of archery from the rules of *nature*. We ſee, that birds and fiſhes are larger in their middles than at their extremes, in order that they may float upon and move through their elements with facility. Hence, it ſhould ſeem, that a *breaſted* (or high *cheſted*) ſtele is beſt calculated for *diſtant* flight, by *floating* longer in the air, than one tapered or made heavy towards the pile. Modern archers uſe the breaſted ſteles for moſt lengths, and particularly for flights; and, indeed, except for very *ſhort* lengths or in a *rough* wind, that is the form moſt generally preferred.

SECTION

Digitized by Google

SECTION V.

OF PIECING SHAFTS.

Reaſons—Origin—Utility.

ASCHAM obſerves, that "*piecing* a ſhaft with "brazil, holly, or other heavy woods, is to make "the *pile-end* proportionally heavy with the *feathers* "in flying, for the ſtedfaſter ſhooting. For, if the end "was full heavy with lead, and the wood next it light, "the head end would ever be downwards, and never "fly ſtraight. In piecing, two *points*" (by point, Aſcham probably means *pile*, i. e. the length of the pile) "are ſufficient to prevent the moiſtneſs of the earth "penetrating too much into the piecing, and ſo "looſening the glue. Therefore, many points are more "pleaſing to the eye, than *profitable* for the uſe. Some "uſed to piece their ſhafts in the *nock*, with brazil or "holly, to counterweigh with the head: and I have, "ſays he, ſeen ſome for the ſame purpoſe, bore a hole "a little beneath the nock, and put lead into it. But "yet none of theſe means are at all neceſſary; for the "nature of a feather in flying, if a man mark it well, "is able to bear up a wonderful weight. And I think "ſuch piecing was firſt introduced, when a good archer "had broken a good ſhaft in the feathers; and, on ac-"count of the partiality he had for it, was loth to loſe "it: therefore he would piece it. And then, by and "by, others, either becauſe it looked ſmart, or becauſe "they would imitate a good archer, cut their *whole* "ſhafts

Digitized by Google

" ſhafts and pieced them; a thing, in my opinion, more " expenſive than uſeful."

Upon the ſubject of *piecing* arrows, Aſcham ſpeaks with diſcernment; for, generally ſpeaking, it is only a *favourite* arrow that is worth the experiment and expence. Moſt arrows, when pieced, loſe ſomewhat of their original ſpirit, and become more ſluggiſh. Lime, pieced with *lance-wood* or other *hard* wood, makes a very good *roving* arrow.

SECTION VI.

OF THE NOCK.

Nocks of Arrows differently made—Advantages and diſadvantages of different Nocks conſidered—Obſervations on the double Nock.

" THE *nock* of the ſhaft," ſays Aſcham, " is diffe- " rently made; for, ſometimes it is large and full, " ſometimes handſome and ſmall: ſometimes wide, " ſometimes narrow, ſometimes deep, ſometimes ſhal- " low, ſometimes round, and ſometimes long: ſome " ſhafts have one nock, and others have a double nock; " each of which hath its advantage. The large and " full nock may be well felt, and many ways ſaves a " ſhaft from *breaking*. The handſome and ſmall nock " will go *clean* away from the hand; the wide nock has " *no* advantage, but, on the contrary, often *breaks* the " ſhaft, and *ſlips* ſuddenly out of the ſtring: while the " narrow nock avoids both theſe harms. The deep

Digitized by Google

" and long nock is good in *war*, for ſure *keeping* in the " ſtring. The ſhallow and round nock is beſt for our " purpoſe in *pricking*, for *clean* delivery of a ſhoot. " And double nocking is uſed for double *ſurety* of the " ſhaft."

Modern archery is unacquainted with the *double* nock; but it is ſuppoſed to have been a *croſs* nock: in which caſe, one of the feathers muſt have *run on the bow*. Probably, this expedient was confined to arrows uſed in *war*: and, certainly, it was better that an archer, when in the field, ſhould have the feather of his arrow run on the bow, than his ſhaft rendered uſeleſs by a broken nock. And yet, it is difficult to conceive how an arrow could be uſeful, if *one* of the nocks was broke: the breaking of the nock often extending as far as the *feather*, which muſt, in general, deſtroy the intention of the double nock.

The nock is made by the inſertion of horn into the end of the ſhaft. Sometimes the nock is made of ſolid horn: and ſometimes of the wood and horn, the latter is the leaſt liable to burſt.

In an old manuſcript in the Britiſh Muſeum, (apparently containing detached extracts from Aſcham) is the following obſervation, " ſhafts *pointed* in the *nock* " are more pleaſing than profitable."

SECTION

Digitized by Google

SECTION VII.

OF THE FEATHER.

Importance of the Feather—Obſervations on the Feathers of different Birds—Their different Properties in Archery—Value and Uſe of the Gooſe-feather in former Days—Merits of the Turkey-feather—Obſervations on the Feathers of the Gooſe—Difference of Feathers in the ſame Wing—Reaſons for paying Attention to the Colour of the Feather—Feathers the moſt eſteemed when dropped.

AFTER obſerving, that neither wood, horn, metal, parchment, paper, or cloth, but only a feather is fit for a ſhaft; Aſcham tells us, "that the *feather* is of no "ſmall importance (19), and that it requires great at-

(19) Arrows *without feathers* cannot fly far, and are greatly affected by the wind. Aſcham informs us, that among the ancients, the Scythians (according to Heroditus) were the only people known to uſe arrows without feathers. Many African tribes uſe ſuch arrows at this day: but as they are generally infected with poiſon, they are chiefly uſed againſt near objects. In the Turkiſh quivers we ſometimes find unfeathered ſhafts, which, being larger at the nock and tapered from that to a very fine point, fly but a very little way from the ſtrongeſt bow. Poſſibly, they may be uſed, in teaching young ſhooters the method of drawing and looſing the arrow with eaſe and dexterity; and in order to ſave them the trouble of following a feathered arrow, in its diſtant flight. This ſort of arrow might afford a curious and not unamuſing conteſt of ſkill in *far* ſhooting. It is ſaid, that if a light ſhaft is feathered at *both ends*, the wood being lighteſt at the pile-end and the feather trimmed low at the nock-end and high at the pile-end, and ſhot againſt the wind, that it will *return back again*. And, that a ſhaft feathered in the *middle* will, in its flight, make a *right angle*.

Digitized by Google

" tention. If you obſerve," ſays he, " the feathers of " all ſorts of birds, you will ſee ſome ſo low, weak, and " ſhort; ſome ſo coarſe, harſh, and hard; and the rib " (which is the hard quill that divides the feather) ſo " brittle, thin and narrow; that it can neither be drawn, " pared, nor yet well ſet on: and, except it be a " ſwan's feather for a *dead* ſhaft, which I know ſome " good archers have uſed; or a duck's for a *flight*, " which laſts but one ſhoot; there is no feather but " that of a gooſe, which hath all advantages in it. And, " certainly, at a *ſhort* Butt, which ſome men are ac- " cuſtomed to uſe, the *peacock* feather doth ſeldom " keep up the ſhaft, either ſtraight or level, it is ſo " rough and heavy: ſo that many, who have taken them " up for the ſake of their gay appearance, have laid " them down again for the ſake of utility. Therefore, " for our purpoſe, the *gooſe* feather is the beſt, for the " beſt ſhooter"(20).

At

(20) Aſcham obſerves, that as to the feathers of *eagles*, where-with the unerring ſhafts of Hercules are reported to have been feathered: " the eagles fly ſo high, and are ſo rare and difficult " to come at, that no regard had been paid to them." In what eſtimation the feathers of thoſe birds have been held in the Eaſt, we may learn from the following anecdote.

" Oppoſite to the town of Babadagy, which is the ſeat of the " Baſha of Siliſtria, there is a mountain higher than the reſt. " There are found in the neighbourhood of this city, eagles (called " *Giujigien* by the Turks and Tartars) which are larger than " all other birds; and in ſo great plenty, that the bow-makers, all " over Turkey and Tartary, are from thence furniſhed with fea- " thers for their arrows; although there are not above twelve " quills (and thoſe in their tails) that are fit for that uſe, which " are commonly ſold for a Leonine. They are reckoned better " for that purpoſe than all others: and a ſkilful archer does not " care to uſe any other. If a man has ſeveral arrows in his quiver, " made with other feathers, and but *one* among them fledged with " a quill of one of theſe eagles; that *one* remaining untouched " will *eat* all the reſt to the wood. And it ſeems to have been " upon

Digitized by Google

At the time Aſcham wrote, turkeys were, perhaps, not very common in England (21): or, if they were, yet it is probable, that the merits of the *grey-gooſe wing*, ſo much celebrated both by our hiſtorians and poets as the archers *ſheet-anchor*, were ſo well known and ſo much valued by the archers, that *turkey* feathers were not thought of, for arrows. However, the turkey feather is, perhaps, of little leſs value for the purpoſe of archery, than the gooſe feather: particularly as the former creates ſome variety, at leaſt, in arrows; which we find Aſcham approves of; obſerving, that "when "you are acquainted with the *properties* of *different* "feathers, you may fit your ſhaft according to your "*ſhooting*, becauſe no one rule can ſuit every man." The *Flemiſh* arrows are chiefly feathered with turkey feathers; and they have, of late, been adopted by our Engliſh fletchers. Nor have I ever heard the uſe of them condemned. They certainly poſſeſs a much ſtronger texture than gooſe feathers, and ſeem to be leſs affected by wet or moiſture, which is unqueſtionably an advantage (22). In variety and ſtrength of colour, ſome of them being (in the naturaliſt's phraſe) beautifully *barred*, they far exceed thoſe of the gooſe; and they appear to take a dye much better.

"upon account of this ſtrength, that the Tartarian name of *Giu-*
"*jigien* was given to that kind of eagles." *Hiſt. of the Othman Empire, by Demetrius Cantimir*, p. 319, *note*.

(21) An old couplet ſays,

Turkeys, carp, hops, piccarel and beer
Came in to England all in one year. } 1524.

(22) Gooſe feathers, after they are put upon the ſhaft, are generally covered lightly with gum-water, in order to give them a greater degree of ſtiffneſs, than what is natural to them. By which means they fly better and reſiſt moiſture the more. It is ſaid, that if feathers are ſlightly waſhed with a ſolution of *gum-copal* in ſpirits of *turpentine*, (in the proportion of one third of the former to two thirds of the latter), that they will become impenetrable by moiſture and wet; and, that ſuch a varniſh will not impede the flight of the ſhaft, or otherwiſe injure the feather.

Digitized by Google

" The *old* gooſe feather," continues Aſcham, " is " *ſtiff* and *ſtrong*; good for a *wind*, and fitteſt for a *dead* " ſhaft: the *young* gooſe feather is *weak* and *fine*, beſt " for a *ſwift* ſhaft; and it muſt be trimmed at the firſt " ſhearing, ſomewhat *high*; for, with ſhooting, it will " ſettle and *fall* very much. The ſame thing, although " not ſo much, is to be conſidered in a gooſe or a " gander. A *fenny* gooſe, as her fleſh is blacker, " coarſer and more unwholſome; ſo is her feather, for " the ſame cauſe, coarſer, harſher, and rougher: and " therefore, I have heard very good fletchers ſay, that " the *ſecond* feather in one is better than the pinion in " the other."

" Betwixt the wings is little difference, but you " muſt have *different* ſhafts of *one flight*, feathered with " *different* wings, for *different winds:* for, if the wind " and the feather go both *one way*, the ſhaft will be " *carried* too much. The pinion feather, as it hath the " firſt place in the wing, ſo it hath the firſt place in " good feathering. You may know it, before it is " pared, by a *bought* which is in it; and again, when it " is trimmed, by the thickneſs above and at the " ground; and alſo, by the ſtiffneſs and fineneſs, which " will carry a ſhaft better, faſter and further, as a fine " ſail-cloth doth a ſhip."

Notwithſtanding this opinion of Aſcham's reſpecting the pinion-feather; modern fletchers hold, that the *pinion*-feather is fit only for a *low-feathered* ſhaft, being crooked and ſtiff; and, that the ſecond, third, fourth and other feathers in the wing, have the preference, according to their poſitions: but, that the fifth and following feathers are weak, and ſeldom to be made uſe of.

" The *colour* of the feather is leaſt to be regarded, " yet ſomewhat to be looked to: for a good white you " have

Digitized by Google

" have ſometimes an ill grey. Yet ſurely, it ſtands with " good reaſon to have the *cock-feather* black or grey, " as it were to give a man warning to nock right. That " is called the *cock-feather* which ſtandeth *above* in right " nocking; which if you do not obſerve, the other " feathers muſt neceſſarily *run on the bow*, and ſo ſpoil " your ſhoot."

In ſhooting at the Butts, *white* feathers have the advantage of being more eaſily diſcernible, at the longer lengths, when they light in the Butt, than dark coloured ones.

The feathers of the gander are, for the moſt part, white, and thoſe of the gooſe black or grey.

In the choice of a feather, fletchers prefer thoſe which are *dropped*, to thoſe which are plucked.

Digitized by Google

SECTION VIII.

OF SETTING ON THE FEATHER.

Feathers ſhould be drawn and pared with Care—Cautions and Reaſons—Obſervations and Rules for uſing Long and Short Feathers—Opinion reſpecting the Inclination or Incurvation obſerved in ſetting on the Feather—How far adopted by other Nations—Circularity the Primum Mobile *in Archery.*

ASCHAM, ſpeaking of the ſetting on of the feather, ſays "you muſt look that your fea-"thers are not drawn too haſtily, but pared even "and ſtraight with care. The fletcher is ſaid to *draw* a "feather, when he hath but one ſweep at it with his "knife; and then he planeth it a little, by rubbing it "over his knife. He pareth it, taking time and care "to make every part of the rib apt to ſtand *ſtraight* and "*even* upon the ſtele. This thing, if a man take not "heed of it, he may, perhaps, have cauſe to ſay of his "fletcher, as in dreſſing of meat is commonly ſaid of "cooks; and that is, *that God ſendeth us good feathers, "but the Devil naughty fletchers.* If any fletchers heard "me ſay thus, they would not be angry with me, unleſs "they were bad fletchers; and yet, thoſe fletchers "ought rather to amend themſelves for doing ill, than "be angry with me for ſaying the truth. The "rib in a *ſtiff* feather, may be *thinner*, for ſo it will "ſtand cleaner on; but, in a *weak* feather you muſt "leave

Digitized by Google

" leave a *thicker* rib: or elſe, if the rib (which is the " foundation and ground wherein nature hath ſet every " diviſion of the feather) is taken too near, it muſt " needs follow, that the feather will fall and *drop* down; " juſt as any herb doth, which hath its root too cloſely " pared by the ſpade. The *length* and *ſhortneſs* of the " feather ſerves for *different* ſhafts; as a *long* fea- " ther, for a *long*, *heavy* or *big* ſhaft; the *ſhort* feather " for the *contrary*. Again, the *ſhort* feather may ſtand " *further*, the *long* feather *nearer* the nock. Your fea- " ther muſt ſtand *almoſt ſtraight* on, but yet in ſuch a " manner, that it may *turn round* in flying."

Some modern archers hold this opinion with Aſcham; namely, that each feather ſhould be ſet on *inclining* to the right or to the left hand, according to the nature of the wing; the extreme, neareſt to the pile, of each feather, being about one *quarter of an inch* out of a *direct* line: which method is ſaid to have been an ancient practice, and well calculated to produce that rotatory motion in the arrow, which gives certainty to its flight. While others diſregard it, as of little or no uſe. At preſent therefore, arrows are feathered ſometimes ſtraight, and ſometimes with an inclination.

The Chineſe-Tartars often carry this inclination almoſt *round* the arrow: but neither the Perſians or Turks feather their arrows otherwiſe than in *ſtraight* lines.

And here," continues Aſcham, " I conſider the won- " derful nature of ſhooting; which ſtandeth altogether " by that faſhion, which is moſt apt for *quick moving*; " and that is by *roundneſs*. For firſt, the bow muſt " be gathered round: in drawing it muſt *come round* " equally: the ſtring muſt be round: the ſtele muſt be " round: the beſt nock round: the feather ſhorn ſome- " what round: the ſhaft in flying muſt turn round:

" and

Digitized by Google

" and if it flies far, it flieth a *round compaſs*; for either " above or beneath a round compaſs, hindereth the fly- " ing. Moreover, both the fletcher in making your " ſhaft, and you in nocking your ſhaft, muſt take " heed that *two* feathers *run equally* on the bow. For, " if one feather runs alone on the bow, it will ſoon be " worn, and will not be able to match with the other " feathers: and again, at the looſe, if the ſhaft be " light, it will *ſtart*, and if it be heavy it will *hobble*."

" And thus as concerning the ſetting on of your " feather."

SECTION IX.

OF TRIMMING THE FEATHER.

Rules to be obſerved in Trimming the Feather—Plucking of Feathers—Flight-Arrows how feathered.

" TO ſhear a ſhaft *high* or *low*, muſt be as the ſhaft " is, heavy or light, great or ſmall, long or " ſhort. The *ſwine-back'd* faſhion makes the ſhaft " *deader*; for it gathers more air than the *ſaddle-back'd*; " and therefore, the ſaddle-back is ſurer for *danger* of " *weather*, and fitter for *ſmooth* flying. Again, to ſhear " a ſhaft *round*, as they were wont ſometimes to do, or " after the *triangle* faſhion, which is much uſed now-a- " days, both are good. For *roundneſs* is apt for flying " of its own nature, and all triangular ſhapes, the ſharp " point going before, are alſo naturally apt for quick " entering; and therefore ſaith Cicero, *that cranes taught* " *by nature, always obſerve in flying a triangular form,* " *becauſe that is ſo apt to pierce and go through the air.*"

" Laſt

Digitized by Google

" Laſt of all, *plucking* of feathers is of no avail, for " there is no certainty in it; therefore, let every archer " have ſuch ſhafts, that he may both *know* them and " *truſt* them upon every *change* of weather. Yet, if " they muſt needs be plucked, pluck them as little as " can be; for ſo ſhall they be leſs inconſtant."

" And thus" ſays Aſcham, " I have knit up in as " ſhort a ſpace as I could, the *beſt feathers*, *feathering*, " and *ſhearing* a ſhaft."

All flight arrows have the feathers very *ſhort*, and cut very *low*; generally not *longer* than *three inches*, nor *higher* at the *nock-end*, than *half an inch*. On *very ſhort* and *light* flight arrows, they are cut proportionally ſhorter and lower.

SECTION X.

OF THE HEAD.

Origin and Uſe of the Head—Different kinds of Heads for Pricking—Obſervations on the Uſe and Effect of each—Materials of Heads—Compariſon between the different Effects of ſharp and blunt Heads ſupported by Experiment.

" NECESSITY," ſays Aſcham, " invented a ſhaft-" *head:* firſt, to ſave the end from *breaking*, then " it made it *ſharp*, to *ſtick* better; afterwards, it made " it of *ſtrong* matter to *laſt better:* laſt of all, the expe-" rience and wiſdom of men have brought it to ſuch " perfection, that there is no one thing ſo uſeful belong-" ing to artillery, either to ſtrike a man's enemy ſorer " in war, or to ſhoot nearer the mark at home, than is

" a

Digitized by Google

" a proper head for both purpoſes. For, if a ſhaft " wants a head, it is worth nothing for either uſe (23). " Therefore, ſeeing that heads are ſo neceſſary, they, " of neceſſity, muſt be attended to. *Iron* and *ſteel* are " the fitteſt for heads."

" Now, with reſpect to heads for *pricking* (24), " which is our purpoſe, there are ſeveral kinds: ſome " are blunt heads, ſome ſharp, ſome both blunt and " ſharp. The *blunt* heads men uſe, becauſe they per- " ceive them to be good to *keep a length* with. They " keep a good length, becauſe a man pulls them no " further at one time than at another: for, in feeling " the plump end always equally, they may looſe them " equally: yet, in a *wind* and *againſt* the *wind*, the " weather hath ſo much power on the broad end, that " no man can keep any ſure length with ſuch an head.

(23) An arrow *without a head* will not fly to any conſiderable diſtance, particularly if the pile end of the ſhaft does not *outweigh* the nock-end. Lord Bacon, indeed, tells us (what muſt require extraordinary faith in his opinion to credit) that an arrow, without an iron point, will penetrate to the depth of *eight inches* into a piece of *wood*, when ſhot from a Turkiſh bow; while another arrow, *having an iron point*, will not penetrate near ſo deep. See *Expt. Solitary*, 704. *Nat. Hiſt.* We read that Lord Clifford fell in the battle of Towton; an arrow *without an head*, ſhot from a bow of ſome one laid in ambuſh, having pierced through his throat, and ſtuck in his neck. *Speed*, p. 687.

(24) Aſcham obſerves, that " the heads of the Engliſh arrows " were better in war, than either forked heads or broad arrow " heads; for, the end being lighter, they flew a great deal faſter, " and gave a ſeverer ſtroke." Thoſe uſed when armour was worn, were ſolid, and nearly heart-ſhaped, with ſmall barbs and ridged. In a preceding ſection (Part. 4. Chap. 6. Sec. 3.) is noticed an order for arrows iſſued in the Reign of Edward III. which directs that the wings or beards of the heads ſhall be made *large*. Mr. Moſeley has given Plates of a variety of arrow-heads, for war. They are taken chiefly from thoſe engraved in Père Daniel's *Hiſtoire de la Milice Francoiſe*; and ſeem to have been, for the moſt part, arrow-heads uſed by the French, and particularly by the croſs-bowmen.

" Therefore

Digitized by Google

" Therefore, a *blunt* head, in a *calm* or *down* wind, is " very *good*; otherwiſe none worſe."

" Heads ſharp at the end, without any ſhoulders, " (I call that the *ſhoulder* in a head which a man's " finger ſhall feel before it comes to the point) will " pierce quickly through a wind, but yet the *ſharp* " head has two diſadvantages; the one, that it will keep " *no length:* it keeps no length, becauſe no man can " pull it with certainty as far at one time as at " another; it is not drawn with certainty ſo far at one " time as at another, becauſe it wants the *ſhouldering*; " wherewith, as with a ſure token, a man may be " warned when to looſe: and alſo, becauſe men are " afraid of ſetting the ſharp point in the bow. The " other diſadvantage is that, when it is lighted on the " ground, the ſmall point ſhall every time be in dan- " ger of being *hurt*, which thing, of all others, will " ſooneſt make the ſhaft to loſe the length."

" Now, ſince blunt heads are good to keep a length " with, yet bad for a wind: ſharp heads, good to pierce " the weather, yet bad for a length: certain head- " makers (dwelling in London) perceiving the advan- " tages of *both* kinds of heads joined with an incon- " venience, invented new files and other inſtruments; " wherewith they brought heads for pricking to ſuch " perfection, that all the advantages of both heads " ſhould be united in one, without any diſadvantage at " all. They made certain kinds of heads, which men " call *high-ridged*, *creſted* or *ſhouldered* heads, or *ſilver-* " *ſpoon* heads (on account of the likeneſs ſuch heads " have to the knob end of ſome ſilver ſpoons). Theſe " heads are good, both to *keep a length* and alſo to " *pierce* a wind: to keep a length, becauſe a man may " with certainty pull them to the ſhouldering every ſhoot,

Digitized by Google

" ſhoot, and no further. To pierce a wind, becauſe " the point, from the ſhoulder forwards, breaks the " weather, as all other ſharp things do. So, the blunt " ſhoulder ſerves for the ſure keeping a length: the " point alſo is always fit for piercing in rough and " troubled weather."

With reſpect to the *materials* for heads, (which when not uſed in war are termed *piles*) it may be noticed, that the modern Flemiſh fletchers make many heads of *horn*, which anſwer extremely well; but they are chiefly uſed for the two *ſhort* lengths; namely, the four-rood length, and the eight-rood length.

Aſcham's obſervation, that *ſharp* heads pierce the wind better than *blunt* ones, deſerves ſome conſideration; and may require further experiment. The following trial to prove the juſtneſs of his opinion, was lately made. *Six* arrows, of *equal length* and *weight*, were conſtructed with very great nicety; *three* of them having *ſharp* piles; and the other three of them having that ſort of pile, which Aſcham mentions to have been made by the London head-makers (now called a *roving pile*): the firſt three were ſhot againſt the latter, ſeveral times, the wind being very gentle; and, the reſult was, that the *blunt* piles always flew *further* than the ſharp ones, by about *fifteen yards*.

SECTION

Digitized by Google

SECTION XI.

OF SETTING ON THE HEAD.

Rules for ſetting on the Head—Reaſons why the ſhort Head is better than the long Head.

" HEADS, ſays Aſcham, ſhould be ſet *full* on and " *cloſe* on. Full on, is when the wood is beat " hard up to the end or ſtopping of the head. Cloſe " on, is when there is left enough wood on every ſide " the ſhaft to fill the head: or when it is neither too " ſmall nor yet too large. If there is any fault in any " of theſe points, the head, when it lights on an hard " ſtone or ground, will be in danger either of breaking " or being otherwiſe injured. Stopping the head with " lead, or any thing elſe, is now needleſs: becauſe, " every *ſilver-ſpoon* or *ſhouldered* head is ſtopped of " itſelf. *Short* heads are better than long: for firſt, " the long head is worſe for the maker to file ſtraight " equally every way: again, it is worſe for the fletcher " to ſet ſtraight on: thirdly, it is always in more dan- " ger of breaking when it is on."

CHAP.

Digitized by Google

CHAPTER VII.

OF THE BELT, TASSEL AND GREASE-POT.

Their different Uſes.

THESE articles have already been enumerated among the neceſſary appendages of an archer.

The *Belt* (to which the taſſel and greaſe-pot are ſuſpended) is furniſhed with a *Well* to receive the arrows for immediate uſe.

The *Taſſel*, which is made of worſted, (generally green,) is uſed for the purpoſe of wiping the arrows after they are drawn from the ground.

The *Greaſe-Pot* (which is made of wood or horn) is filled with a compoſition of *ſuet* and *white wax*, to be put occaſionally upon the fingers of the ſhooting-glove, to render them more pliant, and cauſe a ready and eaſy looſe.

Inſtead of the taſſel and greaſe-pot; the archers, in former times, were, as Aſcham tells us, always provided with a piece of cloth and ſome deer's ſuet.

CHAP-

Digitized by Google

CHAPTER VIII.

OF SHOOTING IN GENERAL.

SECTION I.

General Obſervations—Faults obſerved in Archers—Aſcham's Five Points of Archery.

" HE that would attain high perfection in ſhoot-
" ing," ſays Aſcham, " muſt needs begin to
" learn it in his *youth*; the omitting of which thing
" in England cauſes both fewer ſhooters, and alſo,
" that every man that is a ſhooter to ſhoot worſe than
" he might, if he were taught. But the not having
" uſed ſhooting in his youth ſhould *diſcourage* no
" man that is wiſe. For, wiſdom may work the ſame
" thing in a man, that nature doth in a child."

" A child, by three things, is brought to excellence.
" By *aptneſs*, *deſire* and *fear*. Aptneſs makes him plia-
" ble like wax, to be formed and faſhioned even as a
" man would have him. Deſire, to be as good or better
" than his fellows, and fear of them whom he is under,
" will cauſe him to take great labour and pains with
" diligent heed in learning any thing: whereof proceed-
" eth, at the laſt, excellence and perfection. A man
" may, by wiſdom in learning of any thing, and eſpe-
" cially to ſhoot, have three like advantages alſo:
" whereby he may, as it were, become young again,

Digitized by Google

" and ſo attain to excellence. For, as a child is apt " by natural youth, ſo a man, by uſing at the firſt " *weak* bows far underneath his ſtrength, ſhall be as " pliable and ready to be taught fair ſhooting, as any " child: and *daily uſe* of the ſame ſhall both keep him in " fair ſhooting, and alſo, at the laſt, bring him to ſtrong " ſhooting. And, inſtead of the fervent deſire, which " provoketh a child to be better than his fellow; let a " man be as much ſtirred up with *ſhame* to be *worſe* than " all other. And, the ſame place that *fear* hath in a " *child*, to compel him to take pains, the ſame hath " *love of ſhooting* in a *man*, to cauſe him to forſake no " labour, without which no man nor child can be " excellent. And thus, whatſoever a child may be " taught by aptneſs, deſire and fear; the ſame thing, in " ſhooting, may a man be taught by weak bows, " ſhame and love.

" The beſt ſhooting is always the moſt graceful " ſhooting; and Craſſus ſheweth in Cicero, that as " gracefulneſs is the chief point and moſt to be ſought " for in all things, ſo gracefulneſs alone can never be " taught by any art or craft, but may be perceived well " when it is done, not well deſcribed how it ſhould " be done. If a man would ſet before his eyes five or " ſix of the beſt archers that ever he ſaw ſhoot; and of " one learned to *ſtand*; of another to *draw*; of another " to *looſe*; and ſo take of every man what every man " could do beſt; I will venture to ſay, he would come " to ſuch gracefulneſs, as never man came to yet. " But faults in archers do exceed the number of archers, " which are cauſed by the uſe of ſhooting, without " teaching."

" All the diſcommodities," ſays Aſcham in the quaint Phraſeology and curious Orthography of the ſixteenth century, " whiche ill cuſtome hath graffed in archers,

" can

Digitized by Google

" can neyther be quycklye poulled oute, nor yet ſone
" reckened of me, they be ſo manye.

" Some ſhooteth his head forwarde, as though he
" woulde byte the marke: an other ſtareth with hys
" eyes, as though they ſhulde flye out: an other wink-
" eth with one eye and loketh with the other: ſome
" make a face with wrything theyr mouth and counte-
" naunce ſo, as though they were doyng you wotte
" what: an other blereth out his tongue: an other
" byteth his lyppes: an other holdeth his neck a wrye.
" In drawing, ſome fet ſuch a compaſſe, as thoughe,
" they woulde, tourne about and *blyſſe* (25) all the
" feelde: other heave theyr hand nowe up now downe,
" that a man cannot decerne whereat they wolde ſhote:
" an other waggeth the upper ende of his bow one way,
" the neyther ende an other waye: an other wil ſtand
" poyntinge his ſhafte at the marke a good whyle, and,
" by and by, he will gyve him a whip, and awaye *or a*
" *man wite* (26): an other maketh ſuch a wreſtling with
" his gere, as thoughe he were able to ſhoote no more as
" longe as he lyved: an other draweth ſoftly to the
" myddes and, by and by, it is gon you cannot know
" how: an other draweth his ſhafte lowe at the breaſte,
" as thoughe he woulde ſhoote at a rouyng marke, and,
" by and by, he lifteth his arm up pricke heyghte: an
" other maketh a wrynchinge with his backe, as though
" a man pynched hym behynde: an other coureth
" downe, and layeth out his buttockes, as though he

(25) " This alludes to the actions of the Romiſh Prieſt in pub-
" lic benedictions. This paſſage may explain a very obſcure
" phraſe in Spenſer, who calls waiving the ſword in circles, *bleſſing*
" *the ſword.*" Bennet's *Aſcham. Note.*

(26.) In modern phraſeology, this expreſſion would be *ere a man is aware.*

Digitized by Google

" ſhoulde ſhoote at *crowes* (27): an other ſetteth for-
" warde his lefte legge, and draweth backe with head
" and ſhowlders, as thoughe he pouled at a rope, or els
" were afrayd of the marke: an other draweth his
" ſhafte well, untyll within two fingers of the head, and
" than he ſtayeth a lyttle, to looke at hys marke, and,
" that done, pouleth it up to the head, and lowſeth: which
" waye, although ſumme excellent ſhooters do uſe, yet
" ſurely it is a faulte, and good mennes faultes are not
" to be followed: ſumme drawe to farre, ſumme to
" ſhorte, ſumme to ſlowlye, ſumme to quickely, ſumme
" holde ouer longe, ſumme lette go ouer ſone, ſumme
" ſette theyr ſhafte on the grounde, and fetcheth him
" upwarde; an other po: ıteth up towarde the ſkye,
" and ſo bryngeth him downwardes."

" Ones I ſawe a manne whyche uſed a braſar on his
" *cheke*, or ells had ſcratched all the ſkynne of the one
" ſyde of his face with his drawynge-hand: an other I
" ſawe, whiche, at euerye ſhoote, after the looſe, lyfted
" up his ryght legg ſo far, that he was euer in jeoper-
" dye of faulyng: ſumme ſtampe forwarde, and ſumme
" leape backwarde. All theſe faultes be eyther in the
" drawynge, or at the looſe; with many other mo,
" whiche you may eaſilye perceyue, and ſo go about to
" avoyde them."

" Nowe afterwarde, whan the ſhafte is gone, men
" haue manye faultes, whyche euell cuſtome hath
" broughte them to, and ſpecially in cryinge after the
" ſhafte, and ſpeakynge woords ſcarce honeſt for ſuche
" an honeſt paſtyme. Such woords be verye tokens
" of an ill mynde, and manifeſte ſignes of a man that
" is ſubjecte to immeſurable affections. Good mennes
" eares do abhor them, and an honeſt man therefore
" wyl auoyde them."

(27) " That man holdeth his bow like a *crow-keeper*." *Shakſ. Lear.* Act. iv. ſc. 6.

" And

Digitized by Google

" And beſydes thoſe whiche muſt nedes haue theyr " tongue thus walkinge; other men uſe other fautes; " as ſome will take theyr bow and wrythe and wrynche " it, to poule in his ſhafte, when it flyeth wyde, as yf " he draue a carte. Some wyl gyue two or three " ſtrydes forwarde, daunſing and hoppynge after his " ſhafte, as long as it flyeth, as though he were a mad " man. Some, which feare to be farre gone; runne " backwarde; as it were to poule his ſhafte back; " an other runneth forwarde whan he feareth to " be ſhort, heauynge after his armes, as though he " woulde helpe his ſhafte to flye. An other writhes " or runneth aſyde, to poule in his ſhaft ſtrayght. One " lifteth up his heele, and ſo holdeth his foot ſtill, as " long as his ſhafte flyeth. An other caſteth his arm " backwarde after the lowſe. And an other ſwynges " hys bowe aboute him, as it were a man with a ſtaffe " to make roume in a game place. And manye other " faultes there be, which nowe come not to my remem- " braunce."

" Thus, as you have hearde, many archers, wyth " marryng theyr face and countenaunce, wyth other " partes of theyr bodye, as it were menne that ſhoulde " daunce antiques, be farre from the comelye porte " in ſhootyng, which he that woulde be excellent muſt " looke for.

" Nowe ymagen an archer that is cleane wyth- " out al theſe faults, and I am ſure euery man would " be delyghted to ſe hym ſhoote."

Having thus given us a pretty long catalogue of archers faults; Aſcham, in the next place, tells us, that *graceful* ſhooting conſiſts of theſe things; of

Standing, *Nocking*, *Drawing*, *Holding*, and *Looſing*.

Theſe five principal heads (which are now generally termed *Aſcham's Five Points of Archery*) will be arranged

 under

Digitized by Google

under different ſections; in order to their being the more diſtinctly noticed and clearly underſtood. But, as an archer, after having furniſhed himſelf with a bow, muſt begin with *ſtringing* and *bracing* it; ſome obſervations upon thoſe two heads, ſeem to be very neceſſary for his information, before he proceeds to apply the arrow to the ſtring. And ſtringing the bow firſt offers itſelf to our notice: in treating of which Aſcham will be our guide.

SECTION II.

OF STRINGING THE BOW.

Cautions—Different Effects of the high and low Bend—Rule for aſcertaining the proper Bend—Of Stringing a Bow that is caſt—Poſition of the String to be attended to.

" IN ſtringing your bow," ſays Aſcham, " you muſt " obſerve the proper length of it. For if the ſtring " is too ſhort, the bending will give, and at laſt ſlip " and endanger your bow. If too long, the bending " muſt of neceſſity be in the ſmall of the ſtring, which, " being hard drawn, muſt conſequently ſnap in ſunder, " to the deſtruction of many good bows. Beſides, " you muſt ſee that your bow is well nocked, leſt the " ſharp edge of the horn cut the ſtring in two. And " that commonly happens when the ſtring, at the bot- " tom horn, has but one twiſt to hold itſelf by. You " muſt alſo obſerve to ſet your ſtring ſtraight on, or " elſe one end of the bow will writh contrary to the " other, and break the bow. When the ſtring begins, " never ſo little, to wear, truſt it not, but caſt it away; " for

Digitized by Google

" for, *it is 'an ill ſaved half-penny that coſts a man a* " *crown.*"

" Alſo, in ſtringing your bow, you muſt have regard " to an high or a low bend, for they are directly con- " trary in their purpoſe. The low or ſmall bend has " but one advantage, which is in ſhooting *quicker* and " *further* than the other: the reaſon of which is, that, " when the bend is low, the ſtring has a longer ſpace " to act in before it parts with the ſhaft. The high " or great bend poſſeſſes many advantages: for it " makes the drawing and ſhooting eaſier, the bow " being half drawn. It does not require a bracer, for " the ſtring, being at a great diſtance from the bow, " ſeldom if ever reaches the arm: And, for the ſame " reaſon, will ſcarcely ever hit a man's clothes. It " does not injure the ſhaft-feather, as the low bend " often does: and it admits of a man ſeeing his mark, " much better than the latter. Therefore, let your bow " have a very good bend, a *ſhaftment and two fingers* " *at the leaſt.*"

It has long been the cuſtom, to aſcertain the due bending or (as it is now generally termed) *bracing* of the bow by placing the fiſt perpendicularly on the interior upper end of the handle, raiſing up the thumb as high as it will reach. If the ſtring touches the extremity of the thumb, the bow is deemed to be well braced; if it is higher or lower than the extremity of the thumb, it muſt be altered accordingly. By the *ſhaftment*, Aſcham means either that part of the ſhaft or arrow which is occupied by the feathers, or elſe, that part of it which extends from the nock to the point of the feathers neareſt the pile. Both the meaſure by the thumb thus extended, and this ſhaftment (if the feathers are not ſet very far from the nock) will be found to be about ſix inches, which is ſuppoſed to be a ſufficient

Digitized by Google

bracing for common lengths. For very long lengths, the meaſure of the bending may be half an inch or one inch lower: but when bows bend forwards, or (in the archers phraſe) *follow the ſtring* very much, they neceſſarily enlarge the bending, and carry the ſtring further from the bow.

If a bow is caſt on one ſide (which will ſoon be diſcovered by looking down it when it is braced), let the ſtring at that end of the bow which is caſt, lie moſt on the convex ſide, which will tend to bring the bow into its proper line, and in ſome degree remedy the defect while it exiſts. This poſition of the ſtring ſhould be occaſionally attended to, during the time of ſhooting, leſt it ſhould alter. And, the ſame occaſional attention ſhould, *in general*, be paid to the ſtring; as the nooſe will ſometimes ſlip a little awry although the bow is not caſt; and, if the nock of the upper horn is not made true, the eye of the ſtring will incline to one ſide, and make the bow crooked.

SECTION III.

OF BRACING AND UNBRACING THE BOW.

Ancient and Modern Methods.

THERE are two ways of bracing, and two of unbracing, the bow. The old method of bracing was performed by reſting the lower horn of the bow upon the ground (the belly of the bow being turned towards the archers body); and whilſt one knee preſſed the belly outwards and the inſide of one hand ſupported the upper end of the bow, the ſtring was ſlipped into the nock, with the other hand. The modern way of performing

Digitized by Google

performing this, is to ſet the lower horn of the bow on the ground (the bow being held obliquely and the back turned towards the archer's body) againſt the inſide of one foot, turning the toe of that foot a little inwards to prevent its ſlipping; and to pull up the bow ſtrongly at the handle with one hand, whilſt the wriſt of the other hand, placed almoſt perpendicularly, preſſes down the upper limb of the bow, and the thumb and knuckle of the fore-finger of the latter hand carries the eye of the ſtring into the nock. When the bow is very ſtrong, by quickening the motion of the bracing-hand the bracing will become eaſier. This method of bracing a bow is not common to all archers. Some extend their finger, and others both the thumb and finger, bearing upon the palm of the hand or brawny part of the thumb, to bring the ſtring into the nock. But herein, as well as in many other points in archery, an archer will find it neceſſary to conſult eaſe and his own particular ſtrength. The bow may be unbraced by holding it in the ſame poſition, preſſing down the upper limb in the ſame manner, and unhinging the eye of the ſtring with the thumb and forefinger; or, by placing the lower horn on the ground, keeping the bow in an oblique poſition, and preſſing the belly, at the handle, outwardly with one hand; whilſt the interior ſide of the other hand ſupports the upper limb of the bow, and the fore-finger of that hand unhinges the ſtring.

In Strutt's *Horda-Angelcynnan* (vol. ii. pl. iii. fig. 15.) will be found engravings of ancient Norman Archers, one of which is ſeen bracing his bow according to the ancient cuſtom above noticed.

If the bow is ſomewhat too powerful for the archer *alone* to brace, he will be able to brace it with eaſe, by the aſſiſtance of another perſon placing his finger on the upper

Digitized by Google

upper horn, and bringing that downwards at the time the archer pulls up the bow at the handle and carries the ſtring into the nock: or, by placing the upper horn of the bow under any kind of ledge or other ſupport, and keeping it from ſlipping away, by puſhing the lower horn towards the ledge ſtrongly with his foot, whilſt his hand carries the ſtring into the nock.

SECTION IV.

OF STANDING.

Rules to be obſerved in aſcertaining the proper Poſition and Attitude of an Archer—Authorities—Remarks and Inſtructions—Reference to the Frontiſpiece—Characteriſtics of Archery—The Archer's Attitude a Subject of Admiration.

" THE firſt point in ſhooting," ſays Aſcham, " which " requires the attention of the ſhooter, is to take ſuch " a footing and *ſtanding* (28) as ſhall be both pleaſing to " the eye, and advantageous to his purpoſe: ſetting his " countenance and all other part of his body in ſuch a

(28) What Aſcham here terms *ſtanding*, he might with propriety have called *poſition*, *figure*, or *attitude*: for, his obſervations upon this head embrace more than the mere *footing*; and, in a ſubſequent part of his work (ſee *poſt*, ſec. 12.): he again makes uſe of this word *ſtanding*, in a more confined ſenſe, and to ſignify barely the *footing*. On which account I have, for the ſake of diſtinction, ventured to ſubſtitute the latter for the former word, as the head of the ſection referred to.

" manner

Digitized by Google

" manner and poſition, that both all his ſtrength may
" be employed moſt to his own advantage; and his
" ſhot made and managed to other men's pleaſure and
" delight. A man muſt not go haſtily about it, for that
" is raſhneſs; nor yet make too much ado about it, for
" that is over-care: one foot muſt not ſtand too far
" from the other, leſt he ſtoop too much, which is un-
" becoming; nor yet too near the other, leſt he ſhould
" ſtand too ſtraight up; for ſo a man ſhall neither uſe
" his ſtrength well, nor yet ſtand ſtedfaſtly. The mean
" betwixt both muſt be kept, a thing more pleaſant
" to behold when it is done, than eaſy to be taught
" how it ſhould be done."

Aſcham, having before enumerated all the faults, in his recollection, uſual among archers, (moſt of which do not ſeem to have been *gentlemen's* faults; for, we may ſuppoſe that he took many of his hints from clowns, and the inferior claſſes of people who came to ſhoot with their betters) has, in the next place, given us an haſty ſketch of the true poſture which an archer ſhould adopt. But this part of archery requires much explanation, although, as Aſcham juſtly obſerves, it is moſt difficult to be taught or deſcribed by the pen. However, by way of confirmation to Aſcham's remarks, and the better to explain this part of archery, which merits great attention, two authorities occur: the firſt is taken from Biſhop Latimer; who, in his ſermon (quoted p. 80.) ſays, " in my time, my poore fa-
" ther was as diligent to teach me to ſhute, as to
" learn any other thinge: and ſo I thinke other menne
" dyd theyr children. He taught me howe to drawe,
" howe to *laye my bodye in my bowe, and not to drawe*
" *with ſtrength of armes*, as divers other nations doe;
" but with ſtrength of the bodye." And the other from

Nicoll's

Digitized by Google

Nicoll's London's Artillery; wherein he deſcribes the proper figure of an archer, thus,

" Setting his *left leg ſomewhat foorth before*,
" His arrow with his right hand knocking ſure,
" *Not ſtooping, nor yet ſtanding ſtreight upright*,
" Then with his left hand little 'bove his light,
" Stretching his arm out, with an eaſy ſtrength
" To draw an arrow of a yard in length."

The archer ſhould not oppoſe his *front* but his *ſide* to the mark; by which means he not only eyes it better, but alſo gives a greater ſcope to his drawing arm.

By *laying the body in the bow*, is meant the *inclination* of the *head* and *cheſt* a little forwards: but the archer muſt bend as little as poſſible from the *waiſt*, and muſt beware of inclining to his *left ſide*. This inclination forwards, not only enables him to bring his bow-arm more in a direct line with his drawing-arm, and to ſee his mark better; but alſo, at the ſame time, frees his his cheſt, coat and hat (which latter ſhould be turned up on the ſhaft-hand ſide) from the ſtring, in its return: and, when the bow-arm is brought forward, the ſtring will not catch the upper edge of the bracer; which young archers often perceive, without being able to diſcover the cauſe or to remedy the fault. His knees ſhould be *ſtraight*, not bent, his hams being extended, but poſſeſſing an *eaſy* firmneſs; and he ſhould keep his feet *flat* and *firm* upon the ground, without reſting more upon one leg than on the other; for, a partial bearing upon one leg tends to render him unſteady, and to enervate his whole action. Yet, it has been obſerved, that the moſt perfect archer of this day was accuſtomed to lay a *little* more ſtreſs upon the *right* than upon the left leg. His left foot ſhould be advanced a little before the right; the outſide of the former ſhould be almoſt parallel to the mark, whilſt the

Digitized by Google

the latter may retain its common eaſy poſition. The heels may be about five or ſix inches apart.

It is, perhaps, more within the power and compaſs of the *pencil*, than the pen, to expreſs and do juſtice to this part of archery; and therefore, the young archer is referred to the figure which forms the frontiſpiece to theſe tracts (the production of a celebrated modern artiſt). The deſign of this figure is to aid the foregoing verbal deſcription, by conveying to the eye as accurate a repreſentation as the pencil can well command, of the true poſition and attitude of an archer, drawing his bow *at a point blank mark*. It is not, indeed, an eaſy taſk for the greateſt artiſt to expreſs correctly and unitedly all the characteriſtic points of a perfect archer, in the act of drawing the bow and looſing the arrow: which form a diſplay of *ſtrength*, *eaſe*, *coolneſs*, *reſolution*, or *fixed deſign*, *dexterity* and *vigour*, that moſt evidently indicate the united effort of the body and the mind; and form that model of graceſulneſs, the attainment of which is ſo pointedly recommended by Aſcham.

In the archer's attitude, manlineſs and ſtrength firſt ſtrike us: for there is ſcarcely a muſcle in the whole body, which does not perform a part in this united action. To theſe we ſee joined a natural eaſe, ſo neceſſary to give a proper ſcope to the due exertion of bodily ſtrength, and which is ſupported by a coolneſs that carries with it the idea of pains and attention, and prognoſticates ſucceſs: the expectancy of which is heightened by an apparent firm and ſteady reſolution or fixed deſign, highly pourtrayed in the *eye*, which ſeems *rivetted* to the mark and looking in the center of *that* for the arrow which is *not yet looſed*. Laſtly, we obſerve that critical niceneſs and dexterity, added to an energy

Digitized by Google

energy and vigour in looſing the arrow, ſo eſſentially neceſſary to crown the whole.

The figure of an archer drawing his bow has always been a theme of admiration; as moſt juſtly conveying a true idea of the ſtrength, elegance and dignity of the human form.

Captain Turner, whoſe travels have been quoted a little before (page 152, *note*), ſpeaking of the archery of the Booteeans, of whoſe ſkill in the uſe of the bow he was an eye-witneſs, makes the following remark. It "was," ſays he, "impoſſible to behold their ſport without admiration; for, beſides the ſtriking peculiarities "in the perſon and dreſs of a Booteean, the act of "drawing the bow exhibits, in my opinion, one of the "moſt graceful attitudes of muſcular exertion: the "fencing ſchool has not one that diſplays an athletic "figure to greater advantage." *Embaſſy in Tibet, Part* 2. *Ch.* 1. *p.* 180.

The archer's attitude did not fail to excite the talents and emulation of the greateſt artiſts in former ages; to which, the productions of the ancients, ſtill in exiſtence, will bear ample teſtimony. The poet, the painter, the ſculptor and the engraver appear to have been equally indebted to archery, for many of their exquiſite performances (29).

So

(29) The following trifling occurrence led me to conſider the great loſs ſuſtained by the *poet* and the *painter*, on the diſuſe of the bow. Paſſing a few days ago, through a principal ſtreet in London, I obſerved upon the pavement, the endeavors of a poor wounded ſoldier to attract the notice and charity of paſſengers, by ſome rude deſigns in chalk: among his figures was a *leg*, which he had repreſented as transfixed by a barbed arrow. Upon queſtioning him, whether he had ever received a wound in that part from an arrow, he anſwered in the negative: but added, that he had received a *bullet* in the ſame part, which paſſed through his leg; and that he had ſubſtituted the *arrow* by way of *ſymbol*. This circumſtance brought to my recollection, that *greater* artiſts had

Digitized by Google

So great has been the ſucceſs of Homer in his deſcription of the archer drawing his bow, (See *Iliad.* 4. l. 123. &c.) that the great and "*illumin'd*" Gibbon, when quoting the paſſage, *exclaims*, "how conciſe—"how juſt—how beautiful is the whole picture! I ſee "the attitudes of the archer——I hear the twang of "his bow."

SECTION V.

OF NOCKING.

Nocking the eaſieſt part of Archery—Cautions—Method of preventing irregular Nocking—Of Handling the Bow.

"TO nock well," ſays Aſcham, "is the eaſieſt point "of all; and therein is no art, but only conſtant "attention to nock truly, not ſetting the ſhaft either "too high or too low, but exactly ſtrait a croſs the "bow. Inconſtant nocking makes a man loſe his "length. And beſides, if the ſhaft-hand is high and "the bow-hand low, or the contrary; both the bow "is in danger of breaking, and the ſhaft, if it is ſmall,

had, upon ſimilar occaſions, been compelled to reſort to this *ſymbol*. The artiſt, who deſigned the medal ſtruck upon the late eſcape of the King from the piſtol of a maniac, deſpairing to repreſent that weapon and its bullet ſo as to be *picturefquely* ſuitable to the ideas he wiſhed to convey, has, I obſerve, boldly uſed the poor ſoldier's *ſymbol*, and deſigned an *arrow* broken by a ſhield, ſupported by an inviſible arm. In the battle of Haſtings, the poet deſcribes the appearance of the arrow, after it had transfixed the body, in many different ways. *Rowley's Poems.*

will

Digitized by Google

" will ſtart; if great, it will hobble. You muſt always " nock the *cock-feather upwards:* and be ſure the ſtring " does not ſlip out of the nock, for then all is in danger " of breaking."

It has been already remarked, that ſeveral modern archers, in order to prevent irregular nocking, whip the preciſe *nocking point* of the ſtring with ſilk of one colour, and whip on each ſide of that, with ſilk of a different colour, the breadth of the drawing-fingers.

In order that the arrow may fly true to the mark; care ſhould be taken, that the nocking-part of the ſtring, when whipped, *fills* the nock of the ſhaft ſo tight as to prevent the arrow moving, without being liable to burſt the nock of the arrow.

" When," ſays Aſcham, " you have fixed your ſhaft " in the bow, you muſt take the latter exactly in the " middle, or elſe you will loſe your length, and riſk " the breaking your bow."

By the *middle*, Aſcham here means, that the *upper part* of the bow-hand ſhould be upon the upper part of the handle of the bow, in a line with the nocking point on the ſtring. The arrow ſhould reſt between the bow and the firſt joint of the fore-finger (but preſſing againſt the bow); which finger may be raiſed a little, in order to make a better ſocket or groove for the arrow to lie in: and, the end-joint of that finger ſhould be bent inwards.

SECTION

Digitized by Google

SECTION VI.

OF DRAWING.

Drawing the beſt part of Shooting—Rules and Remarks.

" DRAWING well," Aſcham obſerves, " is the " beſt part of ſhooting. And it is better to draw " to the ear (whereby, Procopius obſerves, men ſhoot " both ſtronger and longer) than to the breaſt. Leo, " the Emperor, would have his ſoldiers draw *quickly* " in *war*, for that makes a ſhaft flie apace."

" In ſhooting at the pricks, haſty and quick drawing " is neither ſure nor graceful. Therefore, to draw " eaſily and uniformly; that is to ſay, not moving the " hand firſt upward, and then downward, but always " after one and the ſame manner, till you come to the " ridge or ſhouldering of the head, is beſt both for " advantage and gracefulneſs."

There is ſome difference among archers in the mode of drawing. Some extend their bow-arm completely, before they begin to draw; others extend it gradually as they draw, which certainly is the eaſieſt method. Aſcham has obſerved that, in his time, ſome, and thoſe very good archers, drew their arrows within about two inches of the pile, then pauſed for a moment and corrected their aim, and afterwards drew home and looſed. But he deems this method a *fault* or *ſhift*, inſiſting that the drawing and looſing ſhould be but *one continued action throughout*.

Digitized by Google

We muſt ſuppoſe, that Aſcham was a proficient in the art, upon which he wrote, particularly as he gave up much of his time to the practice of it: and therefore, that he would not have hazarded a decided opinion upon this point, unleſs he had himſelf experienced the juſtneſs of his remark; and had found that his opinion was ſupported by the concurrence and practice of excellent archers. Yet it muſt be obſerved, that at this day, ſeveral of our beſt archers practiſe and approve of this very *fault* or *ſhift* (if Aſcham will have it ſo). Other very good archers draw within two inches of the pile, and then draw and redraw (in a manner playing with and humouring the bow within thoſe two inches) till they looſe.

It is a principal rule in ſhooting, that the arrow ſhould *always* be drawn *home*, in the manner Aſcham deſcribes; whether it is ſhot at a *ſhort* or a *long* length. He has before, (See *ante*, *Chap.* 6. *Sec.* 10) explained the meaning of the *ſhoulder* of the head of the arrow. And by what he obſerves in this place, it ſhould ſeem, that, in his time, the archers drew very near to the *point* of the head or pile. Perhaps it is beſt to do ſo, but it is not every archer that can (particularly when he uſes the ſharp or ſugar-loaf pile) draw ſo near the extreme point of the pile, without being in danger of ſetting it in his bow. On which account, many archers do not draw beyond where the pile is joined to the wood: that is to ſay, they do not draw beyond the *wood* of the arrow.

We muſt recollect, that Aſcham has cautioned us againſt making too great a *circle* with the body, and pointing the arrow very high or very low, *when we draw*. The foregoing rule for *ſtanding* being obſerved, the archer will find, that as his ſide is turned to his mark, his arms in drawing will move in the arc of a circle.

Digitized by Google

circle. If he holds his drawing-hand about the height of his *waiſt*, he will bring it round to his mark in an eaſy curve.

SECTION VII.

OF HOLDING.

How Holding is to be performed—Poſition in which the Bow ſhould be held.

"HOLDING," ſays Aſcham, "muſt not be long; "for it puts a bow in danger of breaking, and "alſo ſpoils the ſhoot: it muſt occupy ſo little time, "that it may be perceived better in the mind, when it "is done, than ſeen with the eye, when doing."

By *holding*, Aſcham *here* means, holding the *ſtring*, when the bow is drawn up.

He has not noticed the *poſition* in which the bow ſhould be held, at the time of ſhooting. In all or moſt of the prints of ancient archers, we ſee it held in a *perpendicular* poſition: (See the engravings to Strutt's *Horda Angel-cynnan.*) This was certainly the moſt convenient poſition in battle, and it has been generally continued to this day. However, ſeveral of the beſt archers of this day hold their bows *ſomewhat obliquely*. Yet, for ſhooting ſtraight, the former poſition ſhould ſeem to be the moſt certain: and it muſt be obſerved, that the more diſtant the mark, the more perpendicularly muſt the bow be held.

Digitized by Google

SECTION VIII.

OF LOOSING.

Rules to be obſerved in Looſing.

" LOOSING muſt be performed much in the " ſame manner as holding. So quick and " hard, that it be without any twitches: ſo ſoft and " gentle, that the ſhaft fly not as if it was ſent from a " *bow-caſe*. The mean betwixt both, which is per- " fect looſing, is not ſo hard to be followed in ſhooting, " as it is to be deſcribed in teaching. For clean looſ- " ing, you muſt be careful of not hitting any thing " about you. And remember to hold your hand " always the ſame height on your bow, that you may " keep the length truly."

To looſe well is the moſt difficult point in ſhooting; and moſt difficult, as Aſcham obſerves, to be explained on paper: but, as good ſhooting depends greatly upon the *looſe*, it is that branch of the art which muſt be ſtudied with attention and practiſed with pains. The material points to be attended to in performing this movement, are—holding the bow-arm very firm at the moment of looſing, making, it as it were, a *vice* (upon which the ſteady flight of the arrow much depends):—bringing the elbow of the drawing-arm round;—and looſing *while drawing*, without making any pauſe *immediately* before the looſe.

" If," ſays Aſcham, " you follow theſe precepts in " ſtanding, nocking, drawing, holding and looſing, they " will

Digitized by Google

" will, at laſt, bring you to excellent and ſucceſsful " ſhooting."

It may be proper, at the cloſe of the laſt of the foregoing five principal points in archery, to offer the few following remarks, applicable to all of them.

There is obſervable, in the practice of all arts, a great difference in the *manner* in which men perform their labours and operations. The cauſe is very apparent. Scarcely any two men will be found alike. We ſee how materially they differ from each other, in mental and bodily powers; and, how variouſly nature *characteriſes* their actions. Some are ſtrong, ſome weak; ſome are quick, others ſlow in their actions. Objects, ſays Ariſtotle *in his Poetic*, may be the ſame, and the imitation performed by the ſame means, and yet in a *different* manner. Theſe differences appear very forcibly to us in archery. But, independent of this remark, ſome allowance muſt be made for human errors. A perfect archer is, indeed, not every day's object. Aſcham, ſpeaking of his *own* times when archery was more generally practiſed than it is in theſe days, has told us, that if a man would ſet before his eyes *five* or *ſix* of the faireſt archers that ever he ſaw ſhoot; and of *one* learned to *ſtand*, of *another* to *draw*, of *another* to *looſe*, and ſo take of *every* man what every man could do beſt, he would, no doubt, arrive at ſuch perfection as *never man came to yet*. He has alſo obſerved, that *good* archers have their *faults*. Daily experience proves to us, that bad inſtruction and ill example have, in all human actions, a rooted and prevailing influence. The greateſt beauty is often marred by a blemiſh. We muſt therefore, in contemplating and feeling the effects of the former, not overlook or become inſenſible to the latter: and, upon all occaſions, be particularly careful to diſtinguiſh *principle* from *cuſtom* and *habit*, however well diſguiſed

Digitized by Google

the latter may be. An attention to this rule, will be our ſureſt guide to true and unerring excellence in archery.

SECTION IX.

OF SHOOTING AT MARKS.

Firſt Leſſons.

WHEN the archer has attained ſuch a command over his bow, as to be able to brace and unbrace it; and to ſtand, nock, hold, draw and looſe with *eaſe* and *dexterity* (30), he may proceed to ſhoot at a mark.

In modern archery, the firſt and ſhorteſt diſtance is thirty yards, the archer then proceeds to ſixty; which latter diſtance is ſaid to be a key to and to command *all* lengths. But, perhaps the Perſian and Turkiſh me-

(30) The Perſians, according to Chardin, attained to a very great degree of dexterity in theſe principal points. They ſhot, ſays he, into the air, as high as the bow would carry, endeavouring to excel each other in the height of the ſhoot. The art conſiſted in holding the bow properly, drawing and looſing the ſtring with eaſe, without ſuffering the left hand which held the bow and was fully extended, or the right hand which handled the ſtring, to ſhake in the ſlighteſt degree. And, that the inſtructors deemed the exerciſe well performed, when, the bow being held in the left hand ſtiffly ſtretched out, the ſtring was drawn, with the thumb, to the ear, as it were to hang it there. Afterwards, ſays he, they learned to ſhoot at a mark. When, it was not only neceſſary to hit it, but alſo that the arrow ſhould fly ſtraight and firm, without tottering. Laſtly, they learned to ſhoot with force and weight. Tom. 2. Ch. 12.

thod

Digitized by Google

thod is better: according to which, the learner is firſt to practiſe at twenty and even *ten* yards, at which diſtances an archer may become ſo expert as to hit the ſmalleſt mark.

SECTION X.

OF ELEVATION.

Obſervations on Elevation—Higheſt Point of Elevation—Different Methods made uſe of by Archers to obtain due Elevation.—Remarks.

ASCHAM has but barely dropped an *hint* upon this head, in obſerving "that the arrow ſhould "fly a *round compaſs*;" that is, in a parabola or curve; which implies the neceſſity of giving a degree of elevation to the bow: but the due extent of that elevation is a point of ſome difficulty, and depends chiefly on the judgment of the eye. If the elevation is too low, the arrow muſt fall ſhort; and if too high, it muſt fly over the mark. In ſhooting at moderate lengths, the lower the elevation can be made, the more certain is the ſhoot; for, the more the arrow in its flight loſes the track of a parabola or curve, and approaches to an angle, the leſs likely is it to fall upon the mark: and, the higher it aſcends, the more it is liable to be affected by the wind. It is on this account, that a ſtrong armed archer has the advantage of the weak-armed one: the former, by drawing a ſtronger bow, can reach his object

Digitized by Google

with a much leſs degree of elevation, than one who is conſtrained to ſhoot with a weak one. Yet, it muſt be obſerved, that ſome archers ſhoot (and by cuſtom very well too) with an higher elevation than what the bows they ſhoot with require.

In ſhooting very great lengths, the bow muſt often be raiſed to the higheſt point of elevation that can extend the flight of a projectile. This elevation has been aſcertained and fixed at forty-five degrees. But it ſeems, that an error of a degree above or below 45°, will not produce a ſenſible one in the diſtance: becauſe, the ſines, within a degree of 90°, differ very little from the radius, and thoſe ſines, near the elevation of 45°, are as diſtances. *Doctrine of Projectiles, by William Starrat.* Dublin, 1733.

In order to aſcertain the due degree of elevation, ſome archers make uſe of the *knuckles* of the bow-hand as a guide and gradation or ſcale of height, raiſing or depreſſing the bow, and carrying the eye along a firſt or ſecond knuckle, according to their idea of the diſtance, or the fall of their laſt-ſhot arrow. To bring this method to a greater nicety, others have drawn lines, in different colours, upon the glove of the bow-hand, anſwering to twice the number of the knuckles, (one line falling upon the center of each knuckle and another between each knuckle). Mr. Maſon, in his *Conſiderations on the Long-bow and Pike*, ſuggeſts the following ingenious reflection to determine the diſtance of ſuch objects as men and horſes; namely, with the arm extended and the bow braced, to compare the height of objects from head to foot, at different diſtances; as they appear in compariſon of the altitude of the upper part of the bow, when looking over the hand. And, he obſerves, that by ſettling the memory of this in the

Digitized by Google

the eye, or noting the general marks of the variations, the archer can always determine the diſtance with conſiderable preciſion. It would be placing *archery* too much in the back ground, and entering too deeply into the ſcience of optics, particularly the doctrines of fallacious viſion and apparent magnitude, to proſecute this diſcuſſion further.

The advantages to be derived from the uſe of the methods of aſcertaining the due degree of elevation before noticed, reſult, poſſibly, more from *habit*, than from *principle*; particularly as the parabolic *theory* of projectiles ſeems to be giving way to *practice* and *experiment* (31). The eye is an organ of wonderful power; and, as it is *taught*, ſo it continues to exerciſe its functions. And therefore, as he who is inſtructed to read Hebrew without points, will read it with, at leaſt, equal facility with one who has always been accuſtomed to the uſe of ſuch helps: ſo, the archer, who is at firſt inſtructed to ſhoot without having recourſe to ſuch means, (which may often miſlead him through geometrical nicety), will ſhoot as well, or, poſſibly, better, without relying upon them; particularly, as ſome of thoſe methods ſeem to have a tendency to detach the eye from the mark, upon which it ſhould *always*, in ſhooting, be *fixed*.

When this elevation ſhould *begin*, muſt depend upon theſe circumſtances; namely, *diſtance—ſtrength* and *ſpring* of the bow—and the *looſe*. In modern archery, we generally ſhoot *point blank* at a *thirty-yard* mark. If the bow we uſe is very weak, and without much ſpring, it may, even at this ſhort length, require ſome trifling degree of elevation. On the contrary, if it is

(31) See this ſubject examined and explained by the authors of the *Encyclopædia Britannica*, *Tit. Projectiles.*

pretty

Digitized by Google

pretty ſtrong, or has a quick return, and is ſharply looſed, it may enable us to ſhoot point-blank ſomewhat further.

SECTION XI.

OF THE WIND AND THE WEATHER.

Neceſſity for an Archer to underſtand and ſtudy the Nature of the Wind, and to become well acquainted with the Flight of his Arrows—Difference of the Seaſons—Effect of the Weather upon the Bow and the Archer—Effects of the Wind in Archery—Courſe and Nature of Winds—Cautions to be obſerved in ſhooting near the Sea Coaſt and Rivers affected by a Tide.

"THE greateſt enemy of ſhooting," ſays Aſcham, "is the *wind* and the *weather*; whereby the true "keeping of a length is principally hindered. If this "was not ſo, men, by teaching, might be brought to "wonderful near ſhooting. And therefore, as in ſail- "ing the chief point of a good maſter is to know the "tokens of a change of weather, and the courſe of the "winds; that thereby he may the better come to the "haven: even ſo, the beſt property of a good ſhooter "is to know the nature of the winds, with him and "againſt him; that thereby he may ſhoot nearer to his "mark. Wiſe maſters, when they cannot obtain the "beſt haven, are glad of the next: ſo, good ſhooters "who

Digitized by Google

" who cannot, when they would, hit the mark, will " labour to come as nigh as they can.

" A good archer will, firſt, with attentive practice " and marking the weather, learn to know the nature " of the wind; and with prudence will meaſure in his " mind, how much it will alter his ſhot, either in " length-keeping, or elſe in ſtraight-ſhooting. And " ſo, with changing his ſtanding, or taking another " ſhaft, which he perfectly well knows will be fitter for " his purpoſe (either becauſe it is lower feathered, or elſe, " becauſe it is of a better wing) will ſo manage with " judgment his ſhot, that he ſhall ſeem rather to have the " weather under his rule, by good caution and attention, " than the weather ſhall appear to rule his ſhaft by any " ſudden changing. A ſhooter, who puts no difference, " but ſhoots in rough and fair weather alike, ſhall al- " ways *put his winnings in his eyes.* Therefore, in " ſhooting, there is as much difference between an " archer that is a good *weather-man,* and one that " knows and notices nothing about it; as there is be- " tween a blind man, and one who can ſee."

" Thus, with reſpect to the weather; a perfect archer " muſt firſt learn to know the ſure flight of his ſhafts, " that he may be bold always to truſt them. Then " muſt he learn, by daily experience, all kinds of wea- " ther; the tokens of it when it will come; the nature " of it when it is come; the diverſity and altering of it, " when it changes; and the decreaſe and diminution of " it, when it ceaſes."

" He that would underſtand perfectly the wind and " the weather, muſt put differences betwixt times. For " diverſity of time cauſes diverſity of weather. As, " throughout the whole year, ſpring, ſummer, autumn " and winter; ſo, in one day, morning, noon, after- " noon and evening, both alter the weather, and change

" not

Digitized by Google

" not only the power of the bow, but the ſtrength of " a man alſo. And to know that this is ſo, is ſuffi- " cient for an *archer:* nor is it neceſſary for him to " ſearch into the cauſe, why it ſhould be ſo, which " belongs to a philoſopher. In conſidering the " time of the year, a wiſe archer will follow a good " ſailor. In winter and rough weather ſmall veſſels for- " ſake the ſea: ſo likewiſe, weak archers, uſing ſmall " and hollow ſhafts with bows of little power, muſt " be content to give place for a time. And this I do " not ſay to diſcourage any weak ſhooter: for, as there " is no better ſhip than a galley, in a ſmooth and " calm ſea; ſo, no man ſhoots more gracefully or " nearer his mark, than ſome weak archers do, in a " fair and clear day. Thus, every archer muſt know, " not only what bow and ſhaft is fitteſt for him to ſhoot " with, but alſo what *time* and *ſeaſon* is beſt for him " to ſhoot in. And, if the weather is too bad for your " ſhooting, leave off for that day, and wait a better " ſeaſon.

" In every one of the times before mentioned, the " weather alters; ſometimes it is windy; ſometimes " calm; ſometimes cloudy; ſometimes clear; ſome- " times hot; ſometimes cold; ſometimes the wind is " moiſt and thick; ſometimes dry and ſmooth. A little " wind, in a moiſt day, ſtops a ſhaft more than a good " whiſking wind in a clear day. And, indeed, I have " obſerved, when there has been no wind at all, the air " ſo miſty and thick, that both the marks have been " ſurpriſingly large. And once, when the plague was in " Cambridge, the down-wind twelve ſcore mark, for " the ſpace of three weeks, was thirteen ſcore and an " half; and into the wind, being not very great, a " great deal above fourteen ſcore.

" The wind is ſometimes plain up and down, which " commonly is moſt certain, and requires the leaſt

" knowledge

Digitized by Google

" knowledge; wherein an indifferent ſhooter, with indif-
" ferent inſtruments, if he can ſhoot home, may make
" the beſt ſhift. A ſide-wind tries an archer and good
" gear very much. Sometimes it blows a-loft; ſome-
" times cloſe to the ground; ſometimes it blows by
" blaſts; ſometimes it continues in one blaſt; ſome-
" times an archer will find a full ſide-wind, ſometimes
" a quarter-wind (32) and more with him: or, on the
" contrary, againſt him; which may be diſcovered by
" caſting up light graſs; and may be eaſily learnt
" by a very little obſervation and experience."

" To ſee the wind is impoſſible, ſo fine and ſubtil
" is the nature of it: yet, I once had an opportunity
" of obſerving the nature of the wind, by attending to
" a drift of looſe ſnow, over a plain of frozen ſnow, in
" a clear day. Sometimes the wind was not more
" than two yards broad, and would carry the looſe ſnow
" as far as I could ſee: another time the ſnow would
" blow over half the field at once: ſometimes the
" ſnow would tumble ſoftly, and, by and by, it would
" fly ſurpriſingly faſt. And this I perceived alſo, that
" the wind goes by ſtreams and not wholly together.
" For, I could ſee one ſtream within a ſcore of me;
" then, the ſpace of two ſcore, no ſnow would ſtir;
" but, at a like diſtance, another ſtream of ſnow, at
" the very ſame time, would be carried likewiſe, but
" but not equally; for, the one would lie ſtill, while
" the other flew apace, and ſo continue: ſometimes
" more ſwiftly, ſometimes more ſlowly, ſometimes
" broader, ſometimes narrower, as far as I could
" ſee. Nor did it fly ſtraight; but ſometimes it turned
" this way, ſometimes that, and ſometimes it ran

(32) Aſcham diſtinguiſhes the archer's winds thus, *up-wind, down-wind, ſide-wind, full ſide-wind, ſide-wind-quarter.*

" round

Digitized by Google

" round in a circle. And again, the ſnow would be " lifted clean from the ground up into the air, and by " and by, it would be all laid cloſe upon the ground, " as though there had been no wind at all: imme- " diately, it would riſe and fly again. And what was the " moſt wonderful; at one time, two drifts of ſnow " flew, the one out of the weſt into the eaſt, the other " out of the north into the eaſt. And, by means of " the ſnow, I obſerved two winds, the one croſs over " the other like two high-ways. And again, I could " hear the wind blow in the air, when nothing was " ſtirred on the ground. And, when all was ſtill " where I rode, not very far from me the ſnow was " lifted up wonderfully. This experience made me " more ſurpriſed at the nature, than ſkilled in the " knowledge, of the wind: but yet, thereby I learned " perfectly, that it is no wonder at all, that, in the wind, " a man loſes his length in ſhooting, ſeeing, that in ſo " many ways, the wind is variable in blowing."

" The more uncertain and deceitful the wind is, " the more heed muſt a wiſe archer give, to under- " ſtand the changes of it. He that doth miſtruſt, is " ſeldom deceived. For, although thereby he ſhall " not attain to that which is beſt; yet, by ſuch means, " he ſhall at leaſt avoid that which is worſt. Beſides " all theſe kind of winds, you muſt obſerve if any cloud " appears and gathers by little and little againſt you; or, " if a ſhower of rain is likely to fall upon you; for " then, both the driving of the weather and the thick- " ening of the air increaſes the mark: when, after the " ſhower, all things are, on the contrary, clear and calm; " and the mark, for the moſt part, new to begin again. " You muſt take heed alſo; if ever you ſhoot where " one of the marks, or both, ſtand a little ſhort of an " high wall, for there you may be eaſily deceived.

" If

Digitized by Google

" If you take graſs and caſt it up, to ſee how the " wind is, you will frequently ſuppoſe that you ſhoot " down the wind, when you are ſhooting directly " againſt it. And the reaſon is plain: for the wind, " which comes indeed againſt you, rebounds back " again at the wall, and whirls back to the prick and " a little further, and then turns again; as violent " water againſt a rock or high beach. So that, the " graſs caſt up will fly that way which, indeed, is the " *longer* mark, and deceive quickly a ſhooter that is " not aware of it. And this I have repeatedly experi- " enced, when ſhooting at marks ſtanding within walls; " as thoſe at Norwich and York. And therefore, in " ſhooting at marks ſo ſituated, I made uſe of the " following expedient: I firſt went to the middle diſ- " tance between them, which was an open place, and, " with a feather or light graſs, found out as well as I " could, how the wind was: that done, I went to the " prick as faſt as I could, and according as I had found " the wind when I was in the mid-way between the " marks; ſo, I was fain to be content to make my ſhot " as well as I could."

" You muſt alſo be very obſervant when you ſhoot " near the *ſea coaſt*, although two or three miles from " the ſea; for there careful attention will mark ex- " traordinary changes, in the cleareſt day. The ſame " remark may be made by the ſide of a river, eſpe- " cially if it is affected by a tide; where, whoever ſhall " pay a diligent attention to the tide and the weather, " ſhall eaſily bear away the prize he ſhoots for."

SECTION

Digitized by Google

SECTION XII.

OF THE FOOTING.

Footing or Standing in the Wind, the beſt means of counteracting its Effects.

"HAVING thus marked the weather, you muſt," ſays Aſcham, "pay much attention to your "*ſtanding*, that, by comparing the one with the other, "you may regain by the latter what you loſt by the "former. And, in a *ſide wind*, you muſt ſtand ſome-"what *acroſs* into the wind; by which means you will "ſhoot the ſurer."

In the preceding Section, we find Aſcham calling our attention to the winds; in the preſent, he has given us an excellent rule for counteracting their effect upon the arrow.

It is uſual, with ſeveral archers, to make what they term an *allowance* for the wind, ſhooting *wide* of the mark and on the ſide on which the wind lies, in order that the wind may *carry* the arrow to the mark. This requires very great judgment and nice ſhooting indeed, to be of any advantage; and frequently deceives. The young archer ſhould be particularly cautioned not to truſt too much to the wind: for, great reliance upon *that* will not only bring him frequent diſappointment at any one time, but alſo may lead him to contract an habit of truſting more to the wind than to his ſhooting; by which means he will always ſhoot with much uncertainty. *Standing in the wind* and ſhooting through it,

Digitized by Google

it, will be found far more *certain* than leaving the ſhaft to be *guided* by the wind: for, by this means we render unneceſſary, or, at leaſt, greatly contract our allowance for it.

Aſcham muſt frequently have experienced the good effect of this part of archery; for he adds, " this point " well known and properly managed in ſhooting gains " more advantage, commendation, and praiſe to an " archer, than any *other thing* beſides."

SECTION XIII.

OF TAKING AIM.

Obſervations.

" OF giving aim," ſays Aſcham, " I ſcarcely know " what to ſay. In a ſtrange place, it takes away " all opportunity of *foul play* (33), which is the only " praiſe of it; yet, in my opinion, it hinders the " knowledge of ſhooting, and makes men more neg- " ligent, which is diſpraiſe. Though aim be given, " yet obſerve, that at another man's ſhoot you cannot " well take aim, nor even at your own; becauſe, the " weather will alter, even in a minute, and that at one

(33) I confeſs, that I do not comprehend what Aſcham means by *foul play* in giving *aim*; particularly, as archery, of all other paſtimes, ſeems capable of affording the *leaſt opportunity* for foul play. In theſe days it is received and adopted as the moſt gentlemanly recreation, and is attended by the moſt liberal and mannerly ſociety; who have no cauſe to exclaim with the poet, *procul ô procul eſte profani.*

Digitized by Google

" mark, and not at the other, and affect your ſhaft in " the air, when you ſhall perceive no wind on the " ground; as I myſelf have ſeen ſhafts tumble aloft in " a very fair day."

SECTION XIV.

OF KEEPING A LENGTH.

Cautions and Remarks.

" WHEN," ſays Aſcham, " you have taken good " footing; before you ſet your ſhaft in the bow, " obſerve whether it has any earth or wet adhering to " it; for either of them will cauſe it to loſe the " length. You muſt alſo attend to the head, leſt it " ſhould have received any hurt in the laſt ſhoot; for, " by lighting upon a ſtone, the head will ſometimes " be injured, the ſhaft crooked, and the feather da- " maged; the leaſt of which accidents will occaſion a " man to loſe the length. And therefore, they muſt " be noticed when the ſhaft is taken up, and remedied, " by making the head ſmooth, which will aſſiſt its " flight. For which purpoſe, every archer carries about " him a file, a ſtone, fiſh-ſkin, and a piece of cloth."

" To look at the ſhaft head, at the looſe, is the " greateſt help in keeping a length that can be; but " it hinders excellent ſhooting; becauſe a man cannot " ſhoot perfectly ſtraight, unleſs he looks at his *mark*: " was I to ſhoot at a line, and not at a mark, I would " always look at my ſhaft end."

" Now

Digitized by Google

" Now, if you mark the weather *diligently*, keep your " ſtanding *exactly*, hold and nock *truly*, draw and looſe " always *alike*, and keep your elevation *correctly*, you " will never miſs your length."

SECTION XV.

OF SHOOTING STRAIGHT.

Obſervations—Different means to ſhoot ſtraight uſed by different Archers—Different ways of looking at the Mark—Nature and Powers of the Eye—Cauſes of not ſhooting ſtraight—Remedy—Neceſſity of keeping the Eye always fixed upon the Mark.

LASTLY, ſays Aſcham upon the ſubject of ſhooting, " it only remains for you to ſhoot *ſtraight*. " As the weather belongs principally to the keeping a " length, (yet a ſide-wind belongs alſo to ſhooting " ſtraight), even ſo, the nature of the prick is to ſhoot " ſtraight. The length or ſhortneſs of the mark is " always under the rule of the weather: yet, there is " ſomewhat in the mark worthy the notice of an " archer. If the pricks ſtand on a ſtraight and plain " ground, they are the beſt to ſhoot at. If the mark " ſtands on an hill-ſide, or the ground is uneven, with " pits and windings between the marks, the eye muſt " think that to be ſtraight, which is crooked. The " effect of this is ſeen in painting, and it is enough for " an archer to notice and attend to it. The chief rea- " ſon why men do not ſhoot ſtraight, is becauſe they " look at their *ſhaft*. And this fault ariſes, when a

Digitized by Google

" man is not taught to ſhoot when he is young. If he " learns to ſhoot by himſelf, he is afraid of drawing " his ſhaft through his bow; and therefore always keeps " his eye upon his ſhaft, and cuſtom confirms him in " this fault. Men continue longer in this fault, be- " cauſe they find it ſo advantageous in keeping a " length; and yet, to ſhoot ſtraight, they uſe ſeveral " devices. Some fix their eye upon a tree or hill " beyond the mark, or elſe notice ſome plain object " between the marks: others find out ſome mark a " bow wide of the prick, and then take care to keep " themſelves on the hand upon which the prick ſtands: " a method which poſſeſſes a greater advantage, than " thoſe are apt to believe, who have not tried it. " Some, and thoſe very good archers [as has been " before noticed] in drawing, look at the mark, until " the ſhaft is drawn nearly to the head; then they " look at the ſhaft, but at the very looſe, with a ſecond " ſight, they find the mark again. But this method as " well as thoſe before noticed, are but ſhifts, and are " not to be followed in ſhooting ſtraight. For to " have the eye *always* on the mark, is the only " way to ſhoot ſtraight; and, I apprehend, ſo ready " and eaſy a way, if it be learned in youth, and con- " firmed by uſe, that a man will never miſs therein. " Men doubt what way is beſt in looking at the " mark; whether betwixt the bow and the ſtring; " above or beneath the hand; and many other ways: " yet, it is of little conſequence, which way a man " looks at his mark, if he ſhoots gracefully. The " diverſity of men's ſtanding and drawing is the cauſe " of their looking at the mark different ways: yet, they " all lead the hand to ſhoot ſtraight, if nothing elſe pre- " vents it. So that *gracefulneſs* is the only criterion for " looking at the mark."

" Some

Digitized by Google

" Some wonder, why, when the eye is fixed on the " mark, the hand ſhould go ſtraight: but let them " recollect, that the eye commands, as it were, all the " members of the body. This is apparent in many " things, but moſt evident in fencing and fighting; in " which a man ſhall read in the eye of his antagoniſt, " where he intends to ſtrike him. Therefore, an " archer who learns to look at his mark when he is " young will always ſhoot ſtraight. What prevents a " man, who looks at his mark, from ſhooting ſtraight, " are, a ſide wind; too ſtrong or too weak a bow; " a weak bow-arm; the feather running too much on " the bow; a large breaſted ſhaft for one who ſhoots " under-hand, becauſe it will hobble; a ſmall breaſted " ſhaft for one who ſhoots over his hand, becauſe it " will ſtart; a pair of winding pricks; and many other " things, which an archer muſt notice and learn to " amend.

" If a man would leave off looking at his ſhaft, and " would learn to look at his mark, he may make uſe of " the following expedient; which a good ſhooter told " me he once did. Let him take his bow at night, and " ſhoot at *two lights*; when he will, from neceſſity, be " compelled to look always at his *mark*, and never at his " ſhaft; and this method once or twice uſed, will cauſe " him to forſake looking at his ſhaft. Yet, muſt he " be very careful not to *ſet* his ſhaft in his *bow*."

Aſcham means that *both* eyes ſhould be fixed on the mark, as archers do not ſhut one in ſhooting.

I cannot, perhaps, finiſh this chapter on ſhooting, more to the archer's ſatisfaction, than by giving him the two following extracts, relative to the ſubject. The firſt is from Vegetius; and the other is taken from a book printed at the commencement of the ſeventeenth century.

Digitized by Google

" Great attention ſhould be given, that the young
" archer holds his bow with caution and ſkill, occupy-
" ing it manfully: that his left hand is ſteady; that his
" right hand draws the ſtring with judgment; that
" both his eye and his mind act together upon the
" object of his aim: and that, whether on foot or on
" horſeback, he learns to ſhoot ſtraight (34).

" Shooting in the long-bowe, is both healthful
" for the bodie, and neceſſary for the common-wealth;
" the firſt extending the limbes and making them
" pliant, the other an able ſtrength fit to preſerve
" and defend his countrie. And firſt, for ſhooting in
" the long-bowe, a man muſt obſerve theſe few rules:
" firſt, that he have a good eye to behold and diſcerne
" his marke; a knowing judgment to underſtand the
" diſtance of ground to take the true advantage of a
" ſide-winde, and to know in what compaſſe his arrow
" muſt flie; and a quick dexteritie to give his ſhaft a
" ſtrong, ſharpe, and ſodaine looſe. He muſt, in the
" action itſelf, ſtand faire, comely and upright with
" his body; his left foot a convenient ſtride before
" his right; both his hammes ſtiffe; his left arme
" holding his bowe in the midſt ſtrecht ſtrait-out:
" and his right arme with his three firſt fingers and his
" thumb (35) drawing the ſtring to his right eare; the
" nock of his arrowe reſting between his for-finger and

(34) At Doctores ad hanc rem et artifices eligendi: et major adhibenda ſolertia, ut arcum diligenter ac ſcienter teneant, ut fortiter impleant: ut ſiniſtra fixa ſit, et dextra cum ratione ducatur: ut ad illud quot feriendum eſt: occulus pariter animuſque conſentiant: ut ſive in equo, ſive in terrâ, rectum ſagittare doceant. *Vegetius*, Cap. 15.

(35) The thumb is not uſed, but ſomewhat turned down in *drawing*.

" long

Digitized by Google

" long-finger of his right hand; and the ſteale of his " arrowe, belowe the feathers, upon the middle knuckle " of his for-finger on his left-hand. He ſhall draw " his arrow up cloſe to the head, and deliver it on the " inſtant, without hanging on the ſtring. The beſt " bowe is either Spaniſh or Engliſh yewe, and the " worſt of witchen or elm. The beſt ſhaft is of burch, " ſugar-cheſt or braſell; and the beſt feather gray or " white." *Country Contentments.* (London, 1615.) Chap. 8. p. 107. *School of Recreation.* by R. H. 1684.

Digitized by Google

CHAPTER IX.

GENERAL OBSERVATIONS AND CAUTIONS.

SECTION I.

Means of attaining to Excellence in ſhooting—An Art in Archery to be found out and commanded.

IN a preceding part of the *Toxophilus*, we find Aſcham referring the young archer to an attentive obſervation and imitation of the ſeveral qualities of the beſt archers. Bad precepts reduced into practice, as well as bad examples, will only bring him frequent diſappointment. For, as Aſcham obſerves, "there are "ſome who poſſeſs a very good bow and good ſhafts, "and very good knowledge of ſhooting, but they have "been brought up in ſuch *evil-favoured* ſhooting, "that they can neither ſhoot gracefully, nor near the "mark." And that "the want of proper inſtruction "cauſes many to decline beginning to ſhoot, and more "to leave off ſhooting, when they have begun."

After having obtained good inſtruction and example, practice and earneſt endeavours muſt perform the reſt; for, diſuſe and careleſſneſs are ſore enemies to archery.

There is, as Aſcham obſerves, "*an art* in archery," which we muſt endeavour to *find out*, and to *command*. But

Digitized by Google

But we may ſay with the poet; *hoc opus, hic labor eſt.* There are many arts, in which men are ſo aided by a complication of mechanical power, that the *engine*, and *not* the *man*, may be ſaid to accompliſh the end. This is not the caſe with the bow, an inſtrument of moſt ſimple conſtruction; and, being ſo, it depends, for its operation and effect, entirely upon the conſtant attention and ſkill of man. Perhaps, no art whatever requires more attention; if we would attain high perfection in it. Like the art of muſic which can produce many who can perform exceedingly well upon an inſtrument; yet but few *Orpheus's*: ſo, archery can boaſt of many good ſhooters, but of few *Robin Hoods*.

SECTION II.

Of uſing ſtrong Bows—General Rules for chooſing the Power of Bows.

IT is a common fault (particularly with young ſhooters, who, in general, are fond of exerting their ſtrength to the utmoſt) to uſe bows, which are too ſtrong for them to manage with eaſe. By which means, they not only ſtrain their muſcles, but ſometimes injure them ſo much, as to deprive themſelves of the exerciſe of the bow for a time; and ſome have, from this cauſe, repented that they ever took it up. Independent of the obſervation, it is often owing to this circumſtance that young ſhooters make little progreſs in the art; for Aſcham obſerves, that, "this thing makes ſome to overſhoot the mark, ſome to "ſhoot far wide, and perchance to hurt a by-ſtander." And

Digitized by Google

And, in another place, he remarks, " that the ſtrongeſt " men do not always draw the ſtrongeſt ſhot: which " proves, that drawing ſtrong lies not ſo much in the " *ſtrength* of a man, as in the *uſe* of *ſhooting*. For, that " a ſtrong man not uſed to ſhoot, has his arms, breaſt " and ſhoulders, and other parts, wherewith he ſhould " draw ſtrongly, one hindering and ſtopping another." And, " the ſtronger the man, the more unhandſomely " he ſhoots; and the ſooner he breaks his bow." But, " that if a ſtrong man, with *uſe* of ſhooting, could apply " all the parts of his body together, he would then " both drawſtron ger and ſhoot better than another " Man. And thus, ſtrong men, without uſe, can " do nothing in ſhooting, to any purpoſe, neither in " war nor peace; but if they happen to ſhoot, yet, " they have done in a ſhoot or two. When, a weak " man, that is uſed to ſhoot, ſhall ſerve for all times " and purpoſes; and ſhall ſhoot ten ſhafts againſt the " other's four, and draw them up to the point every " time, and ſhoot them to the moſt advantage: draw- " ing and withdrawing his ſhaft when he pleaſes; mark- " ing at one man and yet letting drive at another. " Again, he that is not uſed to ſhoot, ſhall by awk- " wardly holding his bow and knocking his ſhaft, and " not looking to his ſtring in time, continually riſk the " breaking of his bow. Beſides, he will ſhoot very few " ſhafts, and thoſe moſt awkardly; ſome not half " drawn up; ſome too high; ſome too low; nor can " he drive a ſhot at one time, or ſtop a ſhot at another; " but out it muſt, and often to little purpoſe (36)."

Biſhop

(36) The following anecdote will fully prove the truth of Aſcham's obſervations. Some few years ago, there was a ſtrong man named Topham; who exhibited ſurpriſing feats of ſtrength, and who happened to be at a public-houſe near Iſlington, to which

Digitized by Google

Biſhop Latimer in his ſermon (before quoted) informs us, "that he had his bows bought for him according to his *age* and *ſtrength*, and, as he encreaſed "in them, ſo his bows were made heavier and "ſtronger." This method, of learning to ſhoot, was ſcrupulouſly attended to by the Perſians, who trained up their youth to be moſt excellent archers. And Leo, *in his Tactics*, adviſes, that the bow ſhould be ſomewhat *under* the power of the ſhooter (37).

It is not poſſible to lay down any preciſe rule, with reſpect to the exact power of the bow which a young archer ſhould *firſt* take up, or, which is adapted to *every* man. But an obſervation ſimilar to what Aſcham has made, in ſpeaking of arrows, may be very properly applied to this head: namely, that when a man knows his own ſtrength, and the nature of his bow, he muſt provide and fit himſelf accordingly: duly conſidering the kind of ſhooting he propoſes to himſelf, with reſpect to diſtance, which muſt often determine his choice. However, it may be noticed, that few men

which the Finſbury Archers reſorted after their exerciſe. Topham conſidered the long-bow as a play thing, only fit for a child; upon which, one of the archers laid him a bowl of punch, that he could not draw the arrow two thirds of its length. Topham accepted this bet with the greateſt confidence of winning; but, bringing the arrow to his breaſt, inſtead of his ear, he was greatly mortified by paying the wager, after many fruitleſs efforts. The late Mr. Conſtable, who communicated this anecdote, was preſent at the time.

(37) It ſeems very neceſſary, to caution the young archer againſt a ſerious error which has crept into Mr. Moſeley's *Eſſay on Archery*, in the quotation of this paſſage from Leo: according to which quotation, Leo directs the bow to be rather *above* than beneath the power of the ſhooter. See *Moſeley*, page 262. The original ſpeaks thus, Τοξάρια δὲ εκαστον κατα τ᾽ ιδίαν ἰσχυν και ȣχ υπερ αυτην, μαλλον δε και απαλωτερα. Arcus etiam ſingulorum *viribus idoneos*, *non ſupra* vires, ſed potius *infra* vires utentium. *Leonis Tactica*, cap. 6.

who

who have obtained their full ſtrength, and are in perfect health, need fear to take up one under the power of forty-eight or fifty pounds for a ſhort length; of fifty-five pounds for a long length; and of ſixty-pounds for roving or flight ſhooting. Ladies and boys bows poſſeſs, on the average, a power of twenty-ſeven pounds. Yet, we find both boys and ladies, who can uſe bows of thirty-two pounds weight with eaſe and ſkill. The arrows, uſed by ladies and boys, ſeldom exceed the length of twenty-four inches. And it ſhould be obſerved, that an archer may often find it more ſuitable to his ſtrength, inclination and purpoſe, to *increaſe* the power of his *bow*, and *ſhorten* the length of his *arrow*.

SECTION III.

AFFECTIONS OF THE MIND.

IT is abſolutely neceſſary, that the young archer ſhould take up his bow with *coolneſs* and *attention*; for haſte and too great eagerneſs are qualities in an archer which muſt be got rid of, before he can arrive at any degree of excellence in the art. As to *anger* and other affections of the mind, Aſcham cautions us much againſt giving way to them. No inſtrument whatever is more affected by the impulſe of the animal ſpirits than the bow. It is when not only our bows, but our *nerves* are well ſtrung, that we can do juſtice to the art. We muſt call *courage* and *confidence* to our aid, applying, to our purpoſe, the motto of a noble houſe: "*Nec temerè nec timidè.*" What good effects theſe two great

Digitized by Google

great requiſites in archery will accompliſh, cannot be more forcibly inſtanced, than in the following circumſtance. At the battle of Agincourt, the Engliſh archers (who although almoſt to a man greatly reduced in ſtrength, by the want of ſufficient and proper food, and labouring under a raging dyſentery) recollecting the valour of their fore-fathers, and encouraged by their brave prince, met undiſmayed their enemies. And hiſtorians inform us, " with ſuch courage had the " king's words inſpired them, that though before, they " could *ſcarcely bend* their bows, they were now able to " draw their *yard-long* arrows to the *head*."

SECTION IV.

OF BREAKING BOWS.

Means by which Bows are broke—by the String—by the Shaft—by Drawing too far—Remedy and Tokens of theſe Cauſes—by Frets—Obſervations on the Remedy for Frets—by Shooting in Winter.

" A SHOOTER," ſays Aſcham, " breaks his bow " commonly four different ways; by the ſtring, by " the ſhaft, by drawing too far, and by frets.

" By the *ſtring*; when it is either too ſhort, too " long, not ſafely put on, put on with only one wind- " ing or twiſt in the nooſe, put on crooked, cut aſun- " der by a bad nock, or permitted to remain too long " on the bow. When the ſtring fails, the bow muſt

" of

Digitized by Google

" of neceſſity break, and eſpecially in the middle:
" becauſe both ends, having nothing to ſtop them, fly
" back ſo far, that the belly muſt of neceſſity riſe up
" violently; which you will perceive by bending a bow
" backwards. Therefore, a bow which *follows the ſtring*
" is leaſt hurt by the ſtring breaking (38).

" By the *ſhaft* a bow is broken, either, when it is
" too ſhort, and ſo you ſet it in your bow; or, when the
" nock breaks on account of its ſmallneſs; or, when
" the ſtring ſlips out of the nock on account of its
" wideneſs. For you pull it to your ear, and then let
" let it go; which muſt of neceſſity break the ſhaft at
" the leaſt, and endanger not only the ſhaft and the
" ſtring, but alſo the bow: becauſe, the bow poſſeſſes
" no power to counteract its force. This manner of
" breaking a bow, is the moſt dangerous for by-
" ſtanders; for, in this caſe, you will ſometimes ſee
" the end of a bow fly twenty yards from the ſhooter,
" and moſt commonly (as I have often obſerved) the
" upper end of the bow."

" Some archers, who either do not uſe a bow equal
" to their ſtrength, or are apt or fear to *overdraw*
" their arrow, and thereby either ſet it in, or draw it
" through the bow, uſe a piece of cork cut in the
" ſhape of a *wedge* (about an inch broad) the baſe
" of this is glued againſt the inſide of the bow, ſo
" that the arrow may reſt upon it. The cork
" ſhould be covered with parchment (the green co-
" loured is generally uſed), which helps to bind the

(38) Back'd bows being, on account of their reflex form and tendency, more liable to break by the failure of the ſtring than ſelf-bows, which generally follow the ſtring: it has become an obſervation, with the bow-makers, that a ſmart-caſting back'd-bow which ſtands the breaking of the firſt ſtring, adds, thereby, a guinea to its value.

" cork

Digitized by Google

" cork tighter, and makes a ſmooth path for the " arrow.

" The bow is drawn too *far*, two ways. Either, " when you take a longer ſhaft than your own," [or what your bow will bear], " or elſe, when you ſhift " your hand too low or two high for ſhooting properly. " This means pulls a back in ſunder, and then the bow " flies into many pieces."

" So that, when you ſee a bow broken, having the " belly riſen up towards *both ends* or *one*, the ſtring " brake it: when it is broken in two pieces, and, as " it were, *even off*, and, eſpecially in the upper end; the " ſhaft-nock brake it: when the back is pulled aſun- " der in many pieces, too far drawing brake it. Theſe " tokens are either always true, or elſe very ſeldom " erroneous."

" The fourth cauſe that breaks a bow is *frets*; " which render a bow apt and ready to break by any " of the three ways before mentioned. Frets are to be " found in a ſhaft, as well as in a bow, and they are " very ſimilar to a canker, creeping and increaſing in " ſuch parts of the bow as are the weakeſt (39). To " prevent which, your bow muſt be well trimmed and " dreſſed by a ſkilful hand, that it may come round " compaſs every where. If your bow has a knot in " the back, you muſt beware of frets, leſt the parts next " the knot are not left ſtrong enough to bear with the " knot; for, if they are not, the ſtrong knot will fret " the weak places near it. Frets are at firſt ſmall

(39) " Beware," ſays Aſcham, " of your ſhaft-heads, dagger " knives and tags; leſt they ſcratch your bow; a thing, as before " obſerved, both unſightly to look on, and dangerous by giving " riſe to frets." At this day, when no daggers are worn, we have little elſe beſides the ſhaft-head to guard the bow from.

" pinches,

Digitized by Google

" pinches, and (as ſoon as they have ſhewn them-
" ſelves) the places about the pinches muſt be ſcraped,
" to make them ſomewhat weaker; and that as well
" where there is any ſigns of their coming, as where
" it is actually pinched; by which means the pinches
" will die away, and never increaſe further into
" frets."

" Frets begin often in a *pin*, for there the good wood
" is corrupted, and muſt neceſſarily be weak, and conſe-
" quently doth fret. Good bowyers therefore *raiſe*
" each pin, and allow it more wood for fear of its
" freting. Bows, moſt commonly, fret under the hand;
" not ſo much, as ſome ſuppoſe, on account of the
" moiſture as of the *heat* of the hand (40)."

" There is no remedy for frets, but to make the
" fretted place as ſtrong or ſtronger than any other.
" To fill up the fret with ſmall ſhivers of a quill
" and glue, which ſome think will anſwer, muſt be
" uſeleſs. For, ſuppoſe the fret to ceaſe, yet, ſince
" the cauſe which made it fret before (namely weak-
" neſs of the place) is not removed, it muſt neceſſarily
" fret again. With reſpect to cutting out the frets,
" with all manner of piecing of bows, I muſt entirely
" exclude ſuch ſhifts from perfect ſhooting. For,
" pieced bows, like old houſes, are more expenſive to
" repair, than convenient for uſe. Swaddling a bow
" much with bands ſeldom avails, unleſs it is to keep
" down a *ſpell* in the back; otherwiſe, bands either are
" unneceſſary when the bow is good, or uſeleſs when
" it is ſpoilt. And, although mean and poor ſhooters

(40) This might have been the caſe, when the handle was only *waxed*: but, if there is plenty of wood in the handle, is now, (eſpecially as the handle is covered) very uncommon.

will

Digitized by Google

" will ſometimes uſe pieced and bandaged bows,
" becauſe they are not able to procure better; yet,
" upon good conſideration, they will find it leaſt coſt
" and more pleaſure to beſtow a few additional ſhil-
" lings on a new bow, than to pay a ſmall ſum for
" piecing an old one."

" There is another means, which will ſoon cauſe a
" bow to be broken by one of the three ways be-
" fore noticed; and that is, ſhooting in winter when
" there is any *froſt*; which penetrates wherever there is
" any watery humour; as there is in woods more or
" leſs: and, it is well known, that frozen ſubſtances
" will ſooner break than bend. To prevent an acci-
" dent from ſuch a cauſe; the bow muſt, before it
" is uſed, be brought to the fire, and there, by de-
" grees, rubbed and chafed with a waxed cloth: which
" will bring it to ſuch a ſtate, that it may be ſhot in
" with ſufficient ſafety. Take heed alſo of miſty
" and moiſt weather, which will hurt a bow more
" than any rain. For then, you muſt either frequently
" rub it, or elſe leave off ſhooting. In the field alſo,
" when walking between the pricks, you may, either
" with your hand or elſe with a cloth, keep your bow
" in ſuch a temper."

The end of this chapter affords a favourable opportunity, of correcting an inaccuracy in a former page. (*Page* 194). In the explanation of one of Aſcham's five Points of Archery (*drawing*); it was noticed, that he had cautioned us againſt making *too great* a circle with the body. This obſervation is not quite correct; for, in truth, the left ſide of the archer being oppoſed to his mark, *remains ſo* in the action of *drawing*: the *body* neither making any turn, nor deſcribing any part of a circle. But, in bringing the bow round to the mark, the archer only raiſes his arms from his waiſt, in which action the bow and arrow move in a circular direction.

Digitized by Google

SECTION V.

OF PRESERVING BOWS.

Of Poliſhing Bows—Bow-Caſes—of oiling Bows.

ASCHAM obſerves, "that an archer ſhould fre-
"quently rub his bow, with a woollen cloth
"waxed, till it ſhines and glitters; which will cauſe it
"to be clean, pleaſing to the eye, of a good colour, and,
"in time, form ſuch a hard and ſlippery poliſh upon
"it, that neither the weather nor wet can hurt it;
"nor any fret or pinch be able to affect it. This
"ſhould never be omitted after ſhooting (41).

"Bows are greatly preſerved by being kept in caſes,
"made of baiſe or other woollen cloth; which will
"preſerve them in their full ſtrength, ſo that they
"will not give in any weather. Leather, being apt to
"get moiſt, is not ſo good for this uſe. Each bow,
"when carried to any diſtance, ſhould have a ſeparate
"caſe, to prevent their rubbing againſt each other:
"this caſe ſhould not be tight, leſt it ſtrain the bow,
"and cauſe it to caſt itſelf. Several bows thus caſed,

(41) Sir John Smith has informed us (*ante*, Part I. Chap. ii.) That, in his time, the archers made uſe of a compoſition of wax, roſin and fine tallow, for poliſhing their bows; which preſerved them from the effects of all weathers. The *copal oil varniſh* diluted with *ſpirits of turpentine* is known to make an admirable varniſh for wood, impervious to moiſture and wet; and, probably, would prove a very great preſervative to bows, particularly thoſe which are backed; the latter being the ſooneſt injured by damp, which frequently ſoftens the glue: and, when they are drawn, cauſes the back to give way.

"may

Digitized by Google

" may be put into one large leathern caſe; and thus " may be carried without injury. At home, be careful " not to place your bow too near a ſtone wall, which " will make it moiſt and weak; nor too near a fire, " which will render it ſhort and brittle: but, the beſt " way is to put your bows into a wooden caſe (42).

Bows ſhould occaſionally be rubbed with linſeed oil: once in a year is ſufficient. Yew will abſorb oil faſter than moſt other woods, and therefore, care muſt be taken not to give it too much.

SECTION VI.

OF UNBENDING AND CHANGING BOWS DURING SHOOTING.

SOME archers have thought it neceſſary to unbend their bows, whilſt others were ſhooting, and in walking from one mark to the other; in order to prevent the bow loſing its ſpring, by being kept long bent. But, this precaution is unneceſſary: a good bow being found to ſuffer no injury in ſeveral hours ſhooting. When the ſhooting is over, the archer ſhould never fail to unbrace his bow. On this ſubject, Aſcham gives us the following anecdote: I had, ſays he, two bows, the one " quick of caſt, neat and elegant, fit for pleaſure and " profit: the other a *lug*, ſlow of caſt and following

(42) Very convenient caſes have of late years been made, which are called *Aſchams*, in memory of the author of the Toxophilus.

Digitized by Google

" the ſtring; more ſure to laſt, than pleaſant to uſe.
" By accident, they were both left bent all night, and
" part of the next day. In the morning, I found my
" good bow entirely caſt on one ſide, and as weak as
" water: but, as to the lug, it was not at all the worſe,
" but afterwards ſhot as well and as far as ever it did."

An archer ſhould avoid, as much as may be, *changing* his bow or arrows, *during the ſhooting*; as, the change of either, particularly of the *former*, will vary his ſhooting: however, in moving from a long to a ſhort length, or the contrary, it frequently becomes neceſſary to change the arrows, and ſometimes the bow: yet, ſome archers uſe a bow they can command, at all or moſt lengths.

SECTION VII.

ASCHAM'S CONCLUSION.

" THESE things," ſays Aſcham, " ſpoken of me
" generally and briefelye, if they be knowen,
" had, and handled, ſhall bringe a man to ſuche ſhoot-
" inge, as fewe or none ever yet came unto: but,
" ſurely, if he miſſe in anye one of them, he can never
" hitte the marke; and in the more he doth miſſe,
" the farther he ſhooteth from his marke."

To this we may add another remark of Aſcham's, in his own words; viz. " Againe you knowe, Heſiodus
" writeth to his brother Perſes, " that all craftes-men,
" by contendinge one honeſtly with another, do en-
" creaſe theyr cunninge with their ſubſtance." And
" therefore, in London and other great cities, men of
" one craſte moſt commonly dwell together; becauſe in
" honeſte

Digitized by Google

" honeſte ſtrivinge together, who ſhall do beſt, everye
" one may wax both cunninger and rycher. So like-
" wyſe, in ſhootinge, to make matches, to aſſemble
" archers together, to contend who ſhall ſhoote beſt
" and winne the game, encreaſeth the uſe of ſhootinge
" wonderfully amonges men."

Beſides the emulation naturally excited by competition, the " *Meed* of the green Archer," is not wanting to give life to his endeavours; ſince there are very few ſocieties, which have not their bugles, arrows, medals, and other prizes (43). Excellence in this art, has in no age gone unrewarded. The applauſe of numbers, and a prize from the hands of its patrons, mark the hiſtory of home-bred archery. In early times, the victor (according to the *Garland*) was rewarded with a gilt wreath, a ſilver arrow, or a pipe of wine. At the ſhootings in the times of Henry VIII. and Charles II. Wood tells us, the archer's prizes were bows of gold and ſilver, pieces of plate and money. *Bowman's Glory*. The general meetings of the different ſocieties of archers in England, ſince the late revival of the art, have been attended with a very conſiderable diſplay of grandeur. At the meeting on Black-heath (in the year 1791) there were *ſixteen pair* of targets on the ground, each pair having its ſociety in uniform. The novelty of the ſight attracted ſuch a concourſe of people, that the ſhooting was much impeded; which has obliged the archers, on public occaſions, to reſort to ſome more obſcure place. The prizes were *gold* and *ſilver* medals. *See a further account of this meeting in Hargrove's Anecdotes*, p. 100.

(43) The Toxophilite Society are now in poſſeſſion of the badge, noticed by Mr. Barrington, and ſuppoſed to have been preſented to the Finſbury archers, by Catherine of Portugal, wife of Charles II.

Digitized by Google

CHAPTER X.

OF THE SEVERAL KINDS OF SHOOTING, AND THE RULES TO BE OBSERVED THEREIN.

THERE are ſix kinds of ſhooting with the long-bow: viz.

Roving—Hoyle-ſhooting—Flight-ſhooting—Butt-ſhooting—Prick or Target-ſhooting, and Clout-ſhooting.

SECTION I.

ROVING.

ROVING, or ſhooting at rovers, is doubtleſs of all other, the moſt ancient kind of ſhooting; and was principally attended to in this country, during the period when the bow was a national and military weapon. It was that ſtrong and powerful kind of ſhooting, the neglect of which, both Hollinſhed and Aſcham ſo much lament. Rovers, are, in fact, (as the word imports) caſual and unmeaſured or varied marks; generally at conſiderable diſtances, and ſhot at with longer and heavier arrows than thoſe uſed for moſt other kinds of ſhooting. Theſe marks are of three ſorts: namely, 1ſt, *Ground marks*; as land marks, ſtones, or any other objects that are ſufficiently diſtinct, either upon the ground

Digitized by Google

ground, or not more than a foot or two above it. 2d, *High marks*; as trees, tall buſhes, &c. 3d, *Butts, and prick marks.*

This kind of ſhooting was greatly prized by our anceſtors, as peculiarly requiring not only much ſkill, but alſo conſiderable ſtrength, and a knowledge of diſtance; the command of which two latter qualities in archery was every thing in the field. And, ſo attentive was the legiſlature to ſupport and encourage theſe important points in the uſe of the bow; that we find, when archery began to decline upon the uſe of croſs-bows and fire-arms, and men began, as Hollinſhed obſerves, "to "ſhoot compaſs for paſtime," an act of parliament was paſſed (33 Hen. 8. c. 9.) whereby, it is enacted, "that no man under the age of twenty-four years ſhall "ſhoot at any ſtanding prick, except it be at a *rover*, "whereat he ſhall change at every ſhoot his mark, upon "pain for every ſhoot, doing the contrary, four-pence. "And that no perſon, above the ſaid age of twenty-"four years, ſhall ſhoot at any mark of *eleven ſcore* "*yards or under*, with any *prick-ſhaft* or *flight*, under the "pain to forfeit for every ſhoot, ſix ſhillings and eight-"pence." The act does not preſcribe the length or weight of the arrow to be uſed. The ſame act ordered the erection of butts in every town, at which men were to ſhoot on Sundays and holydays.

Theſe butts were often ſhot at as *roving marks*, and not, as we generally ſhoot at them at this day, as *ſtanding marks*, without changing the diſtance at every ſhot; but, going the round and changing the *butt* at *every ſhot*. Dr. Mulcaſter (mentioned in a preceding part of theſe Tracts who lived at the time the above act of parliament paſſed) obſerves, that "in roving you "may uſe either the *butte*, or the pricke, by the way, "for your marke, as your pleaſure ſhall be."

Digitized by Google

The Lengths in the Finſbury Fields, which were of very conſiderable extent, conſiſted of ſeveral hundred marks, from nine ſcore to near twenty-ſcore yards; and were marked by ſtones (44), on which the names of the marks were cut: many of them exiſt to this day. And the Archers diviſion of the Artillery company of London have, for centuries paſt, been in the habit of ſhooting at thoſe marks once in every three or four years; and cauſing all obſtructions, which prevented one mark being ſeen from the other, to be removed: as their charter warrants. As was obſerved, this kind of ſhooting required ſkill, ſtrength, and a good eye capable of aſcertaining, by a glance, pretty nearly the diſtance of the mark to be ſhot at. It was, no doubt, the ſhooting alluded to by Leo, in his *Tactics*, who commanded the archers to exerciſe themſelves "in holts, hills, dales, "woods and plains, to enure them to all the chances "of war." Roving has the advantage of prick ſhooting, by carrying our ſteps through an extent of country. On which account, Dr. Mulcaſter, ſpeaking of the archery of England, adds, "wherein *roving* muſt needes "be the beſt and moſt healthfull, both for varieties of "motion in diverſities of ſoile; and, by uſing *all* archery "in exerciſing one kinde." The particular advantage to the archer, who practiſes roving, is, that by ſhooting at high elevations, frequently at an elevation of forty five degrees, he draws more towards his breaſt, or the point of his ſhoulder; and, conſequently, learns to command a very ſtrong bow, acquires a knowledge of diſtance, and gives a degree of more powerful exertion to his body, than moſt other kinds of archery

(44) See a copy of a map of ſome of theſe marks annexed to Barrington's *Obſervations on Archery:* and the *Ayme for the Finsbury Archers*, which latter contains the names and diſtances of all the marks.

afford;

Digitized by Google

afford; and, in fact, purſues the means to become a perfect archer. For Carew, *in his Survey of Cornwall*, ſpeaking of the fame of the old Corniſh archers, takes occaſion to remark, "that for neere and well-aimed "ſhooting, butts made them perfect in the one, and "roving in the other: for, Prickes, the firſt *corrupter* "of archery, through too much preciſeneſſe, were then "ſcarcely knowne, and little practiſed." (45)

ORDER OF THE GAME.

Rules. (46)

1. For the finding of your mark, it muſt be *within every man's reach*. Alſo the preciſely naming your mark, prevents much altercation.
2. For *whites* you may have as many as you will, ſo they be all *forwards*; and, if you ſhoot at any looſe white, if it be *ſtriken out of ſight*, it is no mark.
3d. Although the wood of the ſtake be above the pin (47), you are to meaſure at the *pin*, if there be any; becauſe it is put in for that purpoſe.
4. If you find a buſh or a black; whatſoever you find *higheſt* in it, being within compaſs of the mark,

(45) Roving is ſtill kept up by the Toxophilite Society. Mr. Barrington informs us, that the late General Oglethorpe, in company with the old Duke of Rutland and others of conſiderable rank, was accuſtomed to ſhoot in the neighbourhood of London. *Obſervations on Archery.*

(46) All theſe rules (except the three laſt) which were always obſerved by the Finſbury Archers, are taken from the *Aime for the Finſbury Archers*, and the rules annexed to *Shotterel and Durfey's Poem on Archery.*

(47) The pin or peg ſecured the mark to the ſtake.

you

Digitized by Google

you are to take the *higheſt* part thereof for your place to *meaſure at*.

5. For all trees you are to meaſure at *foot and pole*; except, in naming them, you ſay, at the *nail*, or at the *hole* in ſuch a tree: or, being a tree of ſo ſmall height, that you may reach the top of it with half your bow, then you may take the higheſt part to meaſure at: but, for foot and pole, you muſt meaſure a foot above the higheſt ground which joins the tree.

6. If, in meaſuring a ſhoot, the difference is ſo ſmall that it cannot be decided: then that competitor ſhall win the ſhoot, which is beſt at the *next* mark.

7. If, in meaſuring a ſhoot, by haſte, the mark is ſtirred out of its place, he is to loſe the ſhoot that meaſures it.

8. If, at firſt coming to the mark, you claim two, and the contrary ſides *draw their arrows*: you are to win no more than you firſt claimed, although your partner, when he comes, *challenges more*.

9. If you name one mark and *ſhoot at another*, you are to looſe your ſhoot, and the others are to follow at the mark named.

10. If your arrow *breaks*, you may meaſure from the neareſt piece that has *wood and head*, or *wood and feather*.

11. If you have any miſhap, as in nocking amiſs, &c. if you can reach your arrow with your *bow*, you may ſhoot again; if it fly further, it is a ſhoot.

12. In ſhooting at rovers, you muſt ſtand no further from your laſt mark [or ſtanding place], than you can reach with half your *bow* (48). 13. He

(48) The rule in *Shotterel and Durfey*, adds, "but at *Pricks* you "are permitted to ſtand *two bows* before your mark, and as much "*behind*

Digitized by Google

13. He who gets the caſt, has the privilege of naming the *ſtanding place* and the *next* mark, and leads.

Note, It is a *general* rule at *all* games, that the ſhooter who gets the caſt, or his partner leads.

14. No arrow can count which is not within *five bows* (49), or *ten yards* of ſome part of the mark.

15. Seven is the game.

Note. As it is not always poſſible to know, whether the mark given, is within the reach of every ſhooter: and it is not always convenient to be reſtrained in point of diſtance, on account of a weak ſhooter; therefore, the firſt of the above rules is ſubject to this variation, viz:

That, if any ſhooter thinks he cannot reach the mark, he may *walk in* a reaſonable diſtance; upon condition, that he ſhoots with a *flight* arrow, and draws it to the *head*. It may here be obſerved, that in ſhooting games in general, the archer is at liberty to uſe what ſort of arrows he chuſes: each archer ſhoots two arrows; and a forfeit is generally paid, if an archer does not diſtinguiſh his arrow, by his own *particular mark*.

" *behind* it as you pleaſe." However, this part of the rule ſeems to have been long exploded, and the former part of it is adopted in *prick-ſhooting* as well as in roving.

(49) The meaſure *by the bow* is alluded to in the following ſtanza:

" The ſcreffes men ſchot foll faſt,
" As archares that weren godde,
" Ther cam non ner ney the marke
" Bey half a god archares *bowe*."

Robyn Hode and the Potter. New Garland.

SECTION

Digitized by Google

SECTION II.

HOYLE-SHOOTING.

HOYLE is an old north country word, ſignifying ſmall eminences, as mole-hills, or thiſtles, docks, and other prominent marks. Hoyle-ſhooting is a game mentioned by Drayton; who, ſpeaking of Robin Hood and his archers, ſays,

"At long butts, ſhort and *hoyles*, each one could cleave the "pin."

Poly-Olb. Song. 26.

This ſort of ſhooting is (ſtrictly ſpeaking) *roving*; as the marks ſhot at are at varied and uncertain diſtances. Indeed, it differs from roving only in this; that thoſe diſtances are *always ſhort*: ſometimes not more than fifteen or twenty yards, at the fancy of the leader. This ſhooting is uſed by way of variation, to conclude and *determine* butt-ſhooting, when the games at the *latter* are *equal* on both ſides.

ORDER OF THE GAME.

Rules.

THE 4th, 6th, 7th, 8th, 9th, 10th, 11th, 12th, 13th, and 15th, rules for roving, are applicable to hoyle-ſhooting.

The mark given is never to exceed *ſix ſcore*—and the neareſt arrow wins.

SECTION

SECTION III.

FLIGHT-SHOOTING.

FLIGHT-SHOOTING takes its appellation from the *flight*, or light arrows uſed in this game: which is ſhot without regard to *mark*, or *fixed* diſtance. The lighteſt arrows that will ſtand in the bow, are made uſe of; and, the greateſt poſſible diſtance is the only object.

This kind of ſhooting affords opportunities of trying experiments; by comparing the flight of long, ſhort, heavy and light, and of ſharp and blunt-piled arrows, in all weathers (50): as well as the powers of different bows.

ORDER

(50) It is ſupriſing how a well-made and well-looſed arrow will contend againſt, and even *gain* upon the wind. The *ſwiftneſs* of an arrow is well deſcribed by Ovid:

Swift as his words the fatal arrow flew,
The Centaur's back admits the feathered wood,
And thro' his breaſt the barbed weapon ſtood.
Met. Fab. 2. l. 26.

And Mr. Moſeley has given us the following lively and picturesque deſcription of the *flight* of an arrow:

"The appearance of an arrow on the wing, viewed on the ſide, "is ſingularly intereſting. Its ſteady movement—the curve it de- "ſcribes—its aſcending and deſcending motion—its velocity, &c. "are all ſources of beauty which never fail to excite agreeable "feelings in the mind, and, even lead us to attribute active powers, "for a moment, to the ſhaft. Weakneſs and ſtrength are well ex- "preſſed by the arrow which arrives ſhort, or which paſſes far over "the target; and the different degrees of ſwiftneſs perceptible in "arrows, from bows of various powers, immediately aſſociate the "ideas of bodily vigour and energy, in various degrees of "ſtrength." *Moſeley*, p. 273.

A *black* arrow is beſt ſeen in the air, and the archer can trace its flight better than the flight of any other.—Arrows may be ſtained with

Digitized by Google

ORDER OF THE GAME.

THIS game ſcarcely admits of any other rule, than that the *furtheſt* ſhot wins: yet, the 6th, 8th, 10th, 11th, 12th, 13th, and 15th rules for roving ſeem to be applicable to this kind of ſhooting.

SECTION IV.

BUTT-SHOOTING.

BUTT, ſays Mr. Barrington, in his *Obſervations on Archery*, is a word ſignifying a mound of earth on which marks are fixed to be ſhot at; and is of French extraction. We find that by the ſtat. of the 33d H. 8. c. 9. butts were ordered to be erected throughout England.

Butts are nearly ſquare, and built in form of a wedge. They are made with turfs of earth. Thoſe dug from a common, where the graſs is ſhort and the roots of heath plants are matted together in it, are the beſt for the purpoſe. Theſe turfs are laid upon each other, and rammed down hard. The length of each butt in front is generally nine feet, or little more; the height ſeven feet: it is four feet

with a black dye made of copperas and logwood, with a ſmall proportion of gum-arabic. They may be poliſhed with ſhamoy leather, upon which a little tripoli has been put; then rubbed with linſeed oil, afterwards dried and rubbed with a woolen cloth, and covered with the copal oil varniſh, thinned with ſpirits of turpentine.

Digitized by Google

feet deep at the baſe; and about one foot four inches broad at the top.

They are frequently ornamented with *crown-clods*, (as they are called); that is, turfs cut into the ſhape of an urn or hour-glaſs, one of which is placed at each corner, and one in the middle. And, it is a very old cuſtom, for the ſhooter, whoſe arrow lodges in one of the crown-clods, to pay *ſix-pence* as a forfeit to the *marker* (51).

Butts are placed at various diſtances. Thoſe erected by the Toxophilite Society, are in ſets: each ſet conſiſting of four, and each butt being thirty yards diſtant from the other; forming a chain of lengths of 30, 60, 90, and 120 yards,—and ſo diſpoſed, that they do not ſtand in the way of the archer, when ſhooting at any of the lengths.

Upon theſe butts (breaſt or about three feet and an half high) is placed the mark; which is a circular piece of thin white paſte-board, four inches in diameter.

Since the late revival of archery, a new kind of butt (ſaid to have been invented in Scotland) has been introduced into the Toxophilite Society, and adopted by it.

(51) The marker is a perſon who attends the butt-ſhooting; always ſtanding by the butt ſhot at. His buſineſs is to mark the ſpot in which every arrow lights in the butt; by placing, for about half a minute, his *marker* (a ſmall white mark fixed in a ſtick which he holds in his hand) cloſe to the arrow; ſo that the ſhooters may notice it. When he removes his marker, he gives them the following ſignals:

For the *beſt* arrow —Three ſhakes with the marker *over his head.*
For the *ſecond* ditto —The like *below.*
For the *paper* prick'd —He takes off his hat and bows, *once* for the *outer* circle—*twice* for the *white*—and *three times* for the *pin.*
For an *over* arrow . . . —He moves the marker briſkly *upwards.*
For a *wide* ditto . . . . ——————————— *horizontally.*
For a *ſhort* ditto . . . . ——————————— *downwards.*
The marker ſeldom attends at any mark of leſs than *ninety* yards.

It

Digitized by Google

It is ſhot, under cover, at the four-rood-length. This butt conſiſts wholly of *ſtraw*, laid firſt in truſſes, and then ſcrewed down as tight as poſſible: the ends are afterwards cut ſmooth. This is a very pleaſant butt to ſhoot at, is durable, (if kept under cover and preſerved from wet); and never injures the arrow.

ORDER OF THE GAME.

THERE are two ways of ſhooting at butt-marks, viz. either *with* or *without* reference to the *inches*.

1. In the firſt caſe, *no* arrow counts which is not *within the inches* (or diſtances allowed). Theſe inches or allowed diſtances, are as follow: *four* inches at the four-rood-length; *eight* inches at the eight-rood-length; and ſo on, allowing *one inch* for every *rood* (52).
2. In the laſt, the arrow *neareſt to the mark* wins.

The Toxophilite Society, in order to ſave the trouble of frequent admeaſurement when the *inches* are ſhot, place their white or mark upon a blue or dark ground; which forms an exterior circle of as many inches in diameter as are allowed. So that, as every arrow counts which comes within the inches; ſo, every arrow within the inches *muſt* be in the *paper*. Hence, this is called the *paper-game*; and is ſeldom ſhot at any other diſtance than the four-rood-length.

Shooting at the inches ſeems to have been a very ancient practice. In the ballads of Robin Hood, we find

(52) Many have *beat* the *inches* at the *four* and *eight* rood-lengths. But none have been known to do that, at the longer lengths. The inches are calculated from the *outſide of the mark*.

mention

Digitized by Google

mention of a *garland*; particularly in the ſong of *Robin Hood and Guy of Giſborne*; and, in *The Lytell Geſte of Robyn Hode.—(New Garland).*

In the latter, we find the following regulation for this ſhooting laid down:

" On every ſyde a roſe *garlonde*,
" They ſhot under the lyne.
" *Who ſo fayleth of the roſe garlonde*," ſay'd Robin,
" His takyll he ſhall tyne."

Seventh Fytte. v. 180.

Rules.

The 6th, 7th, 8th, 10th, 11th, 12th, and 15th rules at rovers are applicable to butt-ſhooting.

The arrow is always meaſured from that part which is neareſt to the *point* of the pin.

SECTION V.

OF PRICK-SHOOTING.

IN archery we frequently find mention of *prick-ſhooting*.—Prick-marks and prick-ſhafts are noticed in the ſtat. of the 33d H. VIII. c. 9. before cited. The latter, we know, are arrows conſiderably lighter than thoſe uſed in other kinds of ſhooting, except flight-ſhooting. The ancient prick-mark was frequently called the *white*; and conſiſted, moſt probably, of a card or piece of ſtiff white paper.

In the *Garland*, indeed, we read of *prick-wands* and *willow-wands* (probably *peeled* ſticks).

One thing we may collect, which diſtinguiſhes this kind of ſhooting from others; namely, that the prick or mark was generally *fixed* to one ſpot, and at a leſs diſ-

Digitized by Google

tance than in other kinds of ſhooting, and not varied during the ſhooting; hence the ſtatute terms it a *ſtanding* prick or mark. Prick being a Saxon word for *point*, ſeems to indicate, that this kind of ſhooting was chiefly confined to ſmall marks. It was that ſort of *cloſe* ſhooting which the ſtatute intended to reſtrain; and which, Carew obſerves, "required too much preciſeneſs." Holinſhed and Aſcham allude to it, under the term of "ſhooting *round compaſs:*" and they agree in opinion with Carew, that it was "the *corrupter* of archery," meaning the powerful archery of the fourteenth and fifteenth centuries.

It was, probably, termed ſhooting in *round compaſs*, becauſe it was plain up and down ſhooting, at two ſhort marks. To this kind of ſhooting King Edward the Sixth, doubtleſs, alludes, in his *MS. Diary*; where, ſpeaking of a ſhooting match in which he bore a part—he obſerves, "I loſt the chaleng of ſhoting at *roundes*, "and wane at rovers." *Cott. MSS. Nero.* c. 10. p. 55.

The marks uſed in this kind of ſhooting have, for more than two centuries paſt, conſiſted either of a ſmall circular piece of white paper, fixed to a poſt by means of a hole and wooden pin (as appears to be repreſented in the frontiſpiece to *Markham's Archery*); or of a target. The former is now *always* placed upon a butt: the latter occaſionally occupies its place on the butt (where we find it placed at public ſhootings).—*See The Remembrance of Shootings, in the Bowman's Glory.* But is generally placed upon a frame, which gives it any degree of elevation required.

It appears by the proceedings of the Finſbury archers, that in the year 1671, they deſigned and preſented a target to the London and Weſtminſter archers; and, that in the year 1754, the ſtewards were directed, "to "provide a target, or ſquare paſteboard, covered with "cloth;

Digitized by Google

" cloth; round the center of which ſhould be drawn a " circle, and about that circle, four concentric rings, to " be viſibly and exactly diſtinguiſhed by colours: ſo, " that the target might conſiſt of *five* rings, valued by " *fifths:* of which, the *center* was to be the *captain's*— " the ſecond or *lieutenant's* was to be 4-fifths of the " captain's—the third 3-fifths of the captain's—the " fourth 2-fifths—and the fifth 1-fifth. The outſide " was to be painted black, and called *ſous*, and to be of " no value."

The modern targets are made of oil cloth, divided into rings or circles as above deſcribed: but, inſtead of ſimple *rings*, the whole diameter, or ſpace between each ring or circle, is *coloured*. The general colours are, for the *center*, *gold*; then *red*; the third white (termed the *inner* white); the fourth *black*; and the exterior circle (termed the *outer* white) *white* (52). Theſe colours being generally painted upon a dark-green ground, all beyond the outer white is now termed the *petticoat*; and, till within a few years paſt, it was a cuſtom of ancient ſtanding and merriment, that an *horn ſpoon* ſhould, during the ſhooting, be worn by whoever laſt ſhot his arrow into the *ſous* or *petticoat*. This target cloth is ſewed upon a boſs, which is made of ſtraw (twiſted as for bee-hives) with a flat ſurface.

(52) The original Finſbury target ſeems to have been preferable to the modern one, not poſſeſſing ſuch a glare of colours.

A few years ago, a target, upon a new principle, called a *Blazon*, was introduced from Flanders, and ſhot at in Mr. Anderſon's ground at Holloway. It was ſquare, and was fixed ſo as to have one angle upwards. Inſtead of circles, the face of it was divided into ſquares, each bearing a number, and next to every number was a cipher. The higheſt number was 26, placed in the center, in a ſmall circle; round which, in the ſame ſquare, was placed number 1; and the next higheſt numbers were at the corners and on the ſides. This target was ſomewhat larger than our common targets.

Digitized by Google

ORDER OF THE GAME.

IN ordinary ſhooting, colour ſtamps no *particular* value upon the hit; but *every* hit in *any* colour counts *one*. At other times, (as in prize-ſhooting), the *firſt* ſhot in the *gold*; or, the *neareſt center* ſhot, *during the ſhooting*, wins. And, ſometimes *every* colour bears a *proportionate* value. Thus, a ſhot in the gold counts 9; in the red 7; in the inner white 5; in the black 3; and in the outer white 1: the exterior circle being, according to calculation, nine times larger than the interior one; and the ſame proportion being obſerved in calculating the value of each circle. The moſt central ſhot gives the title of *captain*, the next that of *lieutenant*—of the *target*. The *greateſt number of hits* gives the title of *captain*; and the next greateſt number, that of *lieutenant*—of *numbers*.

The modern target diſtance is *one hundred yards*. It was formerly greater. At the ſhow and ſhooting in 1583, it was ſeven ſcore and eight yards:—and in 1681 eight ſcore. At the Finſbury yearly target, the firſt diſtance was eleven ſcore yards, and, at every two or three ends, it was reduced ten yards, until it was eight ſcore, at which it remained till the ſhooting was finiſhed.

The ſize of the target ſhould vary in proportion to the diſtance: thus, at *ſixty* yards, it ſhould be *two feet*; at *eighty* yards, *three* feet; and, at an *hundred yards*, *four* feet, in *diameter*.

Rules.

THE Finſbury rule allowed an arrow to reckon *in* that ring *broken* or *depreſſed neareſt* the center; but in the Toxophilite

Digitized by Google

Toxophilite ground, an arrow, *dividing* two colours, can only reckon in the colour *furtheſt* from the center.

The 6th, 8th, 10th, 11th, 12th, and 15th rules obſerved at rovers, may alſo be obſerved in this ſhooting.

SECTION VI.

OF CLOUT-SHOOTING.

THE *clout* is a ſmall white target, generally about twelve inches in diameter. It is faſtened to a ſhort upright ſtick, which is driven into the ground ſomewhat obliquely, till the lower edge of the clout touches, or nearly touches, the ground. The clout, in former days, was a ſquare white cloth.

This game is noticed by Shakſpeare. — See *ante*, *page* 110.

ORDER OF THE GAME.

THE clout is placed at the diſtance of nine or eleven ſcore yards. If at the latter, the diſtance is generally reduced *half a ſcore every game*, till it is drawn in to *nine* ſcore, when it remains fixed. Or (according to the practice in Scotland), the firſt diſtance is *eleven* ſcore, for *five double ends*; the next *ten* ſcore, for the like number of double ends; and, the laſt diſtance is *nine* ſcore yards.

Rules.

THE rules for this game are the 6th, 7th, 8th, 10th, 11th, 12th, 14th, and 15th rules uſed at rovers.

The ſhot muſt be meaſured from the *center* of the clout.

Digitized by Google

SECTION VII.

OF SHOOTING FOR PRIZES.

THE old cuſtom, among the Finſbury archers, in ſhooting for prizes at the target, was, that the *firſt* ſhot in the *gold*, or interior circle, won. This cuſtom probably took place, when the targets were fixed at greater diſtances than they are at preſent. But, as this method proved but ill calculated at the target diſtance now obſerved, either to excite emulation, or to diſplay ſuperior ſhooting; the Toxophilite Society new modelled the cuſtom, by declaring, that the moſt central ſhot, made *during the whole ſhooting*, ſhould be deemed the beſt, and win as the *firſt* center-ſhot formerly did. This method preſerved the old cuſtom of *center-ſhots*, and, at the ſame time, gave opportunity for a longer conteſt of ſkill. But yet it did not altogether decide *ſuperiority* in ſhooting.—To determine which, the Society inſtituted another prize, entitled the *Medal of Numbers*, which is won by the *greateſt* number of *hits* in the target, *without* regard to *colours*.

In order to carry the diſplay of ſkill ſtill further, they ordained, that the bugle (which is annually preſented to them by their patron, his Royal Highneſs the Prince of Wales) ſhould be ſhot for at the target, *changing the Length, and the Size of the Target every end, and giving a value to each colour, in proportion to its proximity to the center.*—(*See ante*, Page 113.) And, as an encouragement to the younger archers, it is a rule, that no member, who has won a bugle, can ſhoot for a *ſecond* till each member has once won one.

This

Digitized by Google

This was a very old rule in prize-ſhooting; as appears by the following curious extract, from a very ancient manuſcript, preſerved in the Harleian collection; entitled "The Booke of certain Triumphes, upon the "Marriage of Richard Duke of York (ſon to Kinge "Edward IV.) with Ann Mowbray, Daughter to the "Duke of Norfolk."

"The challenge of the Ladie Maie's ſervants to all "comers, to be performed at Greenwiche."

"To ſhoot ſtandart arrowe, or flight (53)."

"Item, The fifteenth daye of Maie next followinge, "there ſhal be certain archers of the ſaid Ladye's in the "fielde, at the howers aforenamed; to ſhoot ſtandart "arrowe and flight, with all comers. And he that wil "come and furtheſt ſhootes without ſtand, at any of "theſe games, or at all; (that is to ſaie), the anſwerer "that ſhootes the ſtandart furtheſt, to have a priſe de-"lived him by the judges. And he that ſhootes next, "another; and ſo in like caſe at the arrowe and flight: "provided always, that he that winneth any of the "priſes, ſhall not after that ſhoote againe for none of "the priſes of that game, he hath once woone of, "during the time."—*Harl. MSS.* No. 69.

(53) Stow informs us, that the citizens of London were accuſtomed to ſhoot before the Mayor, Aldermen, and Sheriffs, in Finſbury-field, with the *ſtandard*, *broad-arrow*, and *flight*, for games.—*Survey of London.* (1598). p. 77. And it ſeems, that the Lord-Mayor annually appeared to ſee a prize won, by ſhooting with a *pound-arrow*. *School of Recreation*, by R. H. London, 1684. 12mo.

Digitized by Google

SECTION VIII.

OF THE POPINJAY AND GOOSE.

UNDER the head of Games of Amuſement, afforded by the Bow, we may add thoſe of the *pepingoe* or *popinjay*, and the *gooſe*.

The firſt of theſe two games (which ſeems to be an humane imitation of that deſcribed in the *Iliad* and *Æneid*) is a mark, the ſhape and ſize of a parrot, projected two or three feet from the top of a church-ſteeple. It conſiſts of three looſe parts, (all fixed together upon iron pins or points); namely, the body and two wings: and is ſhot at perpendicularly (the archer reſting his left foot upon the baſe of the tower); and, no arrow which does not ſtrike one of the looſe parts preciſely *at the pin* which ſupports it, can unhinge it. This game is annually practiſed at Kilwinning, in Scotland.

The inhabitants of ſeveral parts of Flanders practiſe the ſame ſort of game, under the title of the *Eagle*.

The *gooſe-ſhooting* was thus:—"A living gooſe was "encloſed in a turf-butt, having its head alone expoſed "to view; and the archer who firſt hit the gooſe's "head, was entitled to the gooſe as his reward. But "this cuſtom, on account of its barbarity, has been "long laid aſide: and, in place of the gooſe-head, a "mark (of about an inch in diameter) is fixed upon "each butt, and the archer, who firſt hits this mark, is "captain of the butt-ſhooters for a year."—*Barrington.*

SEC-

Digitized by Google

SECTION IX.

OF PLUCK-BUFFET.

IN the *Garland* we read of a ludicrous game, intitled *Pluck-buffet*, in which the King is made to engage with Robin Hood:

Our Kynge and Robyn rode togyder.
For ſoth as I you ſay,
And they ſhote *plucke-buffet*,
As they went by the way.

And many a buffet our kynge wan,
Of Robyn Hode that day;
And nothynge ſpared good Robyn
Our Kynge in his pay.

Lytel Geſte of Robyn Hode.
Eight Fytte.

This game is more fully explained in the preceding Fytte; where it was agreed, that whoever ſhould fail of the roſe-garland ſhould

Bere a *buffet* on his *hede*:
I wys ryght *all bare*.

New Garland.
Seventh Fytte.

SECTION X.

OF FISH-SHOOTING, &c.

ALTHOUGH *fiſhing* cannot regularly be introduced under the head of Games in *Archery*, yet is it an amuſement, to which the bow can contribute; and, many archers may be inclined to try the experiment. Shooting fiſh with arrows, is an employment in which the

Digitized by Google

the inhabitants of many of the uncultivated parts of the globe are well ſkilled. A few years ago, Mr. Waring invented an arrow for this purpoſe, which has been uſed with great ſucceſs, both in the meers in Cheſhire, againſt thoſe *tyrants* of the watry plain which frequently break through a net; and, in ſtriking carp from the land.

Mr. Waring has alſo invented arrows for throwing *bullets* and *ſmall ſhot*.—See a deſcription of them, and of the *whiſtling* arrow, in Mr. Moſeley's *Eſſay on Archery*. Mr. Moſeley alſo mentions a ſingular invention (which he deems more curious than uſeful) for taking birds on the wing, by ſhooting a *net* over them, by means of an arrow.—Pages 135, 138.

Digitized by Google

Digitized by Google

Digitized by Google

A

REMEMBRANCE

OF THE WORTHY

SHOW AND SHOOTING

BY THE

DUKE OF SHOREDITCH,

AND HIS

ASSOCIATES

THE

WORSHIPFUL CITIZENS OF LONDON,

UPON

Tuesday the 17th of September, 1583.

Set forth according to the Truth thereof, to the everlasting Honour of the Game of Shooting in the Long Bow.

By W. M.

Digitized by Google

Digitized by Google

TO THE WORTHY

SHOREDITCH DUKE,

AND HIS TWO

NEPHEWS,

SONS TO THE

EARL OF PANCRIDGE,

And to all the Worſhipful Citizens and Chief Archers of the *City* of *London:*

W. H. wiſheth Continuance of Health, with Increaſe of Honour.

BOLDLY have I preſumed (Right Worſhipful Members of this Honourable City) to publiſh unto the eyes of the world, your late laudable work, which not only beautified this city, but the whole realm of England. Rare was the ſight, great was the coſt, yet greater your good wills: the report whereof will be in memory while London laſteth. Now ſeeing no man taketh in hand to deſcribe the ſame as it deſerved, and pitying greatly it ſhould lye hidden, I conſidered that blind Bayard oft times ſeemeth boldeſt, and thereupon my ſelf (though leaſt able of all other) have preſumed, under your correction, to publiſh the truth of what I noted in the train: therein purpoſing, that though to your own ears it bringeth no matter of delight, yet the truth

Digitized by Google

truth of this ſeemly ſhow (which fame hath far ſpread abroad) may through this realm be expreſſed; as alſo left in remembrance unto your childrens children, and their poſterity after them: Beſeeching therefore that your wiſedomes would accept my good will, for which I remain thankful during my life.

Your Worſhips

In all Humility,

W. M.

Digitized by Google

A

REMEMBRANCE, &c.

THE learned in time paſt have greatly commended the penning of hiſtories, becauſe that by them their poſterity is certified, what hath been done in the days of their anceſtors; the benefit whereof is greatly conſidered in the wiſeſt of this age, and I would it were unknown to none. Our Elders heretofore that have regiſtered the great battles and ſkirmiſhes in times paſt, mention that the Long-bow hath done great acts, and been the overthrow of mighty armies: wherefore conſidering what profit and honour our commonwealth of England hath gained by the long-bow, I have thought convenient to ſet down in memory that moſt honourable ſhow of Archers, which was at London on the ſeventeenth of September, 1583; chiefly for two cauſes: firſt, to exhort our Countrymen to continue at home this laudable exerciſe, the better to diſcourage our enemies when they haply hear thereof, that by ſo notable a thing ſhewed but in a merriment, they may the better conjecture what Engliſh men could do, if neceſſity compelled them to the ſame. Secondly, to follow the cuſtom of our anceſtors, which is, to leave enrolled ſuch matter as is worthy memory, that ſo good a work might ſeem new in ſuch our ſucceſ-

Digitized by Google

ſors, and procure them to the furtherance of the like cauſes in themſelves.

The Prince of famous memory, King Henry the Eighth, having read in the Chronicles of England, and ſeen in his own time how armies mixed with good Archers, have evermore ſo galled the enemy, that it hath been great cauſe of the victory; he being one day at Mile-end when Prince Arthur and his Knights were there ſhooting, did greatly commend the game, and allowed thereof, lauding them to their encouragement.

This noble King at another time keeping a princely court at Windſor, cauſed ſundry matches to be made concerning ſhooting in the long-bow: and to which came many principal archers, who being in game and the upſhoot given, as all men thought, there was one Barlo yet remaining to ſhoot, being one of the king's guard; to whom the King very graciouſly ſaid, win them all and thou ſhalt be Duke over all archers. This Barlo drew his bow, and ſhooting won the beſt. Whereat the King greatly rejoiced, commending him for his good archery; and for that this Barlo did dwell in Shoreditch, the King named him Duke of Shoreditch. (A ſign of a princely mind to the encouragement of his poor ſubject.) The memory of all which, both by Prince Arthur and the Duke of Shoreditch, hath been greatly revived, and within theſe five years ſet forward at the great coſt and charges of ſundry chief citizens, whoſe names I omit. And now this preſent year 1583, much more beautified than ever it was, as hereafter is expreſſed. The worthy Shoreditch Duke, as ſucceſſor to the former Dukes his predeceſſors, gave warning to all his Marquiſſes, Earls and Barons, with all their train of archers whatſoever, in and about the city of London, to be in readineſs to accompany him into the field, every one with a long-bow and four ſhafts, upon the ſeventeenth

Digitized by Google

teenth of September, and to meet him in Smithfield, which they did for the moſt part.

On which day in the morning, the Duke being at Merchant-Taylors Hall, there repaired unto him all thoſe that were appointed for the conducting of his perſon to the place of meeting, as Barons, and a multitude of good archers under his own enſign; who with ſound of trumpets, drums, and other neceſſary inſtruments for the beautifying of the ſame, paſſed along Broadſtreet, where the Duke dwelled, marching through Moorgate to Finſbury Fields, and from thence into Smithfield, where a great many attended for him: then the black train, and the Goldſmiths went forward into Holborn, the Duke and his company following in a ſeemly order; where coming againſt Hatton-Houſe, the Goldſmiths ſtaid, and caſt themſelves into ranks, that the Duke might have fair paſſage between them: ſo that the Train being now marching along, and the Duke paſſing by the Marquis Barlo, alias Covell, he preſented to his nobleneſs a wedge of gold, in ſign of good will, which the Duke very thankfully accepted; then came the black train, offering by a Page a ſpeech to this effect, "*that he was ready to aid him with all his power, for* "*his ſafety, into the field:*" whereat the Page, out of a box, flung abroad, gliſtering like gold, certain ſpangles, in ſign of liberality.

Then came the Marquis of Clarkenwell with Hunters, who having been abroad with their hounds, did wind their horns, ſo that the noiſe of them, together with the yelling and yelping of the hounds, and the whooping and hallooing of their Pages which followed, there was ſuch a delight taken by the hearers thereof, as is worth memory; which Marquis coming with his Foreſter, proffered his ſervice to the Duke, which he thankfully accepted; which hunters were under the

Digitized by Google

Earl of Panеridge, whoſe two ſons being nephews to the Duke, came with their power of Knights, Barons and Squires, accompanied with many good and excellent archers, taking place, to the honour of the Duke, into the field. Then the Goldſmiths took their place behind the Duke, whoſe gunners, when the Duke was even paſt, gave a worthy volley of ſhot, which rung in the air like a thunder clap; and ſo took place in the hindward. Then went all the train through Chancery Lane, and turned towards London down Fleetſtreet, until they came to Ludgate, where ſtood ready to receive them into the city, certain Knights of great worſhip, with many other of the Aldermen (1) of the city and ſundry principal Commoners in the ſame, who being men of years, and had born great good will to the laudable game of ſhooting, entered with fair large arrows in their hands, in black gowns, citizen-like, and took their place behind the Duke; and as they yet paſſed through Paul's Church-yard on the ſouth-ſide, there came ſundry Citizens forth unto them (2), all in their gowns, and took place, every one having an arrow, as before, to the better beautifying and ſetting forth of the ſame. Thus paſſed they through into Cheapſide, who by that time they were come thither, all their Train was in place, and marched as followeth. Firſt came two Enſigns before the Marſhal of the field, the Marſhal being clad in green velvet and ſatin, with a truncheon in his hand: then followed him forty Foreſters, apparelled all in green, every one bearing a bow and four ſhafts by their ſide, with horns at their backs, which they winded as they went along.

(1) Sir Owen Hopton, her Majeſty's Lieutenant of the Tower of London, Sir Rowland Haward, and divers Aldermen of London.

(2) At Paul's School came unto them the Merchant Taylors in their gowns, every one having a fair broad arrow in their hands.

And

Digitized by Google

And between every one of them Pages (3), in white frocks girt unto them, upon which was ſowed green oaken leaves, with caps made in the ſame manner; every one bearing a tiller-bow or croſs-bow, and broad arrows in their hands, to the number of forty, all whooping and hallooing when the hunters did wind their horns. Then came ſix trumpets ſounding, with drums and fifes, guarded with halberds; then came the Marquis of Iſlington with twelve Knights, and thoſe ſeveral had ſix gentlemen attendant on them, and Pages in white fuſtian with black ſtripes, and caps agreeable, bearing ſhields, with a ſeemly ſhow of Archers, wearing about their necks and bodies green ribbons, and large green ſcarfs. Next followed a fair, large, red ſtreamer, with the red lion, with halberds, drums, and proper Pages in green, with taffety night-caps, bearing ſhields and ſhafts in their hands. Next five Swattrutters ſtrangely apparelled, with great hoſe down to the ſmall of their legs, with ſtrange caps agreeable; bearing on their necks long ſwords, which ſeemed very ſtern in countenance: then followed five green men (4) clad in ivie, with clubs on their necks, which were young trees, and the roots upward; with a worthy ſhow of bowmen, who for the moſt part wore ribbons of coloured orange tawny, and oranges hanging at them.

Then came the reſidue of the Earl of Pancridge's train in the fore-front thereof; the two ſons to the Earl of Pancridge (himſelf not preſent, but his coſt and

(3) Mr. Beadel, in Paternoſter-Row, and Mr. Smith, in Paul's Church-yard, chieſeſt.

(4) Theſe five green men were prepared by Mr. Wood, who being continual ranger did both expreſs his name, and beautify the ſhow. His badge alſo bare a fair ſhield, upon which ſtood this ſentence, *More ways than one to the wood.* The Marquis of Saint John's wood brought the wild men.

Digitized by Google

charges in ſign of a willing mind did largely appear, with a worthy company of excellent good archers, acompanied with trumpets, halberds, drums, enſigns, and all other things neceſſary to the beautifying of the ſame to their great praiſe, for their large liberalities, beſides the great bountifulneſs of the Earl their father.

Next followed the fellowſhip and near neighbours of Ludgate parts; who, to the furtherance of this ſhow, had been at great coſt in proviſion of trumpets, drums, enſigns, fifes, and other furniture: the moſt part were haberdaſhers of London (5), who very orderly marched through the City of London, being ſumptuouſly apparelled in velvet jerkins, and hats agreeable, with chains of gold about their bodies, and Pages bearing their ſhields of fine workmanſhip, and a worthy train of good archers wearing green ſcarfs and ribbons of the ſame colour. The ſhow of Feryers proceeded, which was one hundred handſome fellows with calivers on their necks, all trimly decked with white feathers in their hats; ſo had all their company of archers throughout: then their enſign and two Cardinals, wearing broad hats of tawny colour, with two ſilk ſtrings buttoned under their chins, the ends hanging down to their feet, apparelled in red velvet and ſatten; next followed two Friars clothed in black robes, with bald crowns, and beads in their hands, ſeeming to pray very devoutly, and bleſſing them that paſſed by, cauſing great laughing and ſport.

Then came the whole inhabitants following, beautifying the ſhow, very coſtly apparelled, with a child in the midſt of them, mounted, on a great horſe richly trapped, ſounding a trumpet, to the great wonder of many the beholders.

(5) Eſpecially Mr. Blamor, chief of them.

Then

Digitized by Google

Then followed the citizens and inhabitants of Fleet-bridge, Fleet-ſtreet, and Temple-bar, with a ſhow worth the beholding, of ſeemly archers, all bravely apparelled in ſilks and chains, with their enſigns, drums, trumpets, and ſuch other furniture. Then the odd deviſe of Saint Clement's pariſh, which but ten days before had made the ſame ſhow in their own pariſh, in ſetting up the Queen's Majeſty's ſtake in Holborn fields; which ſtake-maſter Knevit, one of the gentlemen of her Majeſty's chamber, gave unto them at his coſt and charges: And a gun worth three pounds, made of gold, to be given unto him that beſt deſerved it by ſhooting in a piece at the mark, which was ſet up on purpoſe at Saint James's Wall. Whereby was to be ſeen the great good will of ſo bountiful and worſhipful a gentleman; who hath promiſed yearly, during his life, to give five ſhillings more to the ſame; the gift was given for a year to the winner, and to the pariſh for ever. The liberality of the right honorable lords of the nobility, their bountifulneſs towards the feaſting of the whole pariſh alſo, is worthy remembrance (6). The manner of the ſhow was, firſt, Saint Clement wearing a rochet and a mitre, having a long gray beard, rid upon a horſe, with his man before him, between two hampers full of ſmall white loaves, giving of bread unto the poor, or any that would have the ſame: having alſo twelve men following on foot in white canvas caps, and canvas frocks girt to them, with baſkets on their ſhoulders, waiting upon him, having a blue anchor painted on their breaſts and backs: finding it ſo regiſtered of him in their legendary, that S. Clement was firſt a baker, who for his

(6) The L. of Leiceſter gave them two bucks, and 40s. in money. The E. Arundel did lend them his houſe to feaſt in, beſides a hogſhead of wine and veniſon, which he gave them.

Digitized by Google

good wit and honeſt life, was made a biſhop, and after a Saint. After this ſhow came all the young men of S. Clement's pariſh, very well apparelled with chains and ſome ſcarfs; every one having his Page attending upon him in black frocks, decked with ſilver, with caps agreeable, with edgings of white furs, very ſeemly, bearing ſhields and ſhafts, which before did carry the guns of the batchelors, when they went to ſet up the ſtake, and to ſhoot for the gilded gun. Next followed the ancient houſholders of the ſame pariſh, with their Pages, having an enſign, with drums and ſuch other furniture, with a worthy ſhow of archers following.

Then came the Marquis of Hogſden with a ſtately enſign of red crimſon damaſk, in the midſt of the which enſign there was a phœnix in ſilver carried by two men on two ſtaves, with ſound of trumpets and drums; the ſhow beautified with Pages as before, handſwords to make room, and halberds to guide and keep them in order.

After them came the Marquis of Shackelwell, chief treaſurer to the Duke, with his men, every one with white and green ribbons, and badges in their hats, before whom was carried a moſt fair and long enſign of red damaſk, in the which was the golden lion: after the enſign followed two with hand-ſwords, to make room, and then after them two Pages all in white jackets, upon the which was painted with poudred armour, and the one Page bare a ſhield, on the which was painted a well, on one ſide of the well there was a leg, and on the other an arm, both arm and leg ſhackled to the well, and branches of box ſpringing out of the ſame; the other Page a broad arrow in his hand.

Next after this company came the maſter-comptroller of the Duke's houſe with his men, every man having

Digitized by Google

having a bow and four arrows as the reſt, and green ribbons about their necks.

Then came a large table, wherein was written a deſcription of the benefit of the ſhooting in the long-bow, and how ſhooting has been decayed, and by whom reſtored: advertiſing men from all unlawful games, as dicing, carding, tipling in alehouſes, and ſuch like, wiſhing to have the exerciſe of ſhooting to be had in uſe both by maſters and ſervants, to the ſtrength and commodity of this realm, as alſo to the terror of all foreign enemies, beſides two tables drawn with inſcriptions of honeſt exerciſe: then came two fair enſigns, white and black, with whifflers in chains of gold, with white ſtaves, and henchmen following them bearing ſhields, every ſhield painted with a ſeveral deviſe; then came the Duke himſelf, going between two fine Pages bearing ſhafts, the Duke bearing a ſtandard arrow in his hand, and being apparelled in a long gown, citizen-like, with a hat on his head, agreeable to the order of the chief commoners of the city: then after him followed Sir Owen Hopton, Knight, Lieutenant of her Majeſty's Tower of London, Sir Rowland Hayward, with other the Aldermen and Citizens of London, bearing ſtandard arrows in their hands, with a ſeemly company of archers: then came the Earl of Buckley cloſe with Maſter Daye at Alderſgate, with a ſhow of Marquiſſes and Barons, accompanied with many Knights of archery, beautified with trumpets, drums, enſigns, and halberds, all the archers wearing green ſcarfs; the Black Prince having twelve Knights, and a troop of Barons following him in chains of gold very orderly, and between them Pages in green jackets and green taffety night-caps, all dropped with gold and conceits of rare device on their ſhields.

Then laſt of his train came the Baron Stirrop, whoſe coſtly ſtake will be in memory after he is dead, now

Digitized by Google

now ſtanding at Mile-end. This Baron brought a ſeemly ſhow of good archers, all with green ribbons about their neck, and eſcutcheons in their caps, with the gilded ſtirrop, expreſſing the truth of his name: who, beſides his great coſt and charges in feaſting of his archers, did chuſe many good ringers of his neighbours, who in the morning early did ring at the chieſeſt churches about London, for the honour of the Duke and his company, feaſting them in the moſt commendable manner for their pains, who in the going out of the Duke through the city, did alſo ring the bells in many chief churches all the way he went, and likewiſe at his coming home, to their great pains and labour.

Laſt of all came the Goldſmiths, accompanied with ſome other inhabitants of Cheapſide and elſewhere, that joined with them in company. The invention of the ſhow was worthy noting: firſt came trumpets and drums, with two hand-ſwords playing, making room, with a fair beautified enſign: then the ancienteſt ſort (7) firſt in gowns and hats, with every one a fair large arrow in his hand, expreſſing the good will to the long-bow, and now being aged, do give over that laudable game to their ſons and ſervants, yet ſtill well-willers to the action; and every one of them had his Page ſeemly cloathed in red mandilions, ſtriped with ſilver, like broad laces, and caps of red taffety, edged with white fur; theſe carried their ſhields of ſundry deviſes, in the one of their hands, and an arrow in the other hand: then came a ſhip ready rigged, carried pageant-wiſe, and cunningly made to toſs and lean ſometimes on the one ſide, and ſometimes on the other, with a ſea-fiſh ready to overthrow the ſame, thruſting forth her

(7) Marquis Barlo, alias Covell, was the chief in the forefront of the ſhooters.

head,

Digitized by Google

head, and plucking it in again, in the midſt of the waves, and two Indians or blackmores to go near unto it: on the one end of the ſhip ſtood the unicorn, on the other end the mermaid. The ſhip ſeemed as though it had newly come from India, and by great travel and danger had brought home her burden, laden with gold and ſilver: then followed the younger men of their train, and for the moſt apparelled in ſatin doublets, ſilk hats, chains of gold about their bodies, and ſilk hoſe, with a bow and four ſhafts, and every one had his Page going before him in red mandilions, as before mentioned, and caps accordingly ſuitable, ſome bearing pickers, ſome ſpades, and ſome hammers, ſignifying as though they came from the Indies, and had thence, by great labour, brought home that treaſure which the ſhip carried: and others carried wedges of gold, and ſome of them ſilver, which by workmanſhip is made out of the ſame earth that the ſhip bringeth; and every one of theſe Pages had upon their mandilions theſe ſentences written both before and behind;

Honeſt labour procureth health,
By honeſt labour men come to wealth.

Thus every one had his Page bearing theſe tools, like workmen by whoſe labour many things are made out of gold and ſilver to the uſe of all men, and to the avoiding of idleneſs. Then upon a ſtaff was borne in the midſt of the ſame ſhow, a coronet, whereat hung three arrows of ſilver, very workmanly made; then followed a concert of broken muſick, playing all the way, to the great delight of all the beholders and hearers of the ſame: and laſt of all an hundred ſhot, being very ready and nimble to diſcharge, and theſe were well appointed with powder. Thus went they along through Cheapſide up Cornhill, and turned by Leaden-hall to Biſhopſgate, where at the end of Houndſditch the Street was chained

Digitized by Google

chained in, and there placed the image of a monſtrous giant, which in times paſt dwelt in that place, being ſtoutly defended with long morrice-pikes, halberds, and wheel guns of great ſhot ready charged againſt the Duke's gunners and archers, who valiantly ſhot many arrows into the giant, and diſcharged their calivers, which the giant's men would not put up, but ſhook their ſpears, ſhot off their pieces in ſhow to defend the place, which ſince that giant lived belonged to Prince Arthur. Thus for ſport on both ſides, the trumpets ſounded, the drums ſtruck up, the enſigns were toſſed in ſeemly ſort, and the fencers with tanſwords made room, beginning a battle in ſeemly ſhow, the Shot of the Goldſmiths diſcharged their ſhot ſo faſt, and in good order, to the ſhaking of the giant's fort, that hardly the people near hand, might know one another. Thus the train paſſed to Shoreditch church, and then turned down into Hogſden-fields, into a fair large green paſture ground of goodly compaſs, where a tent was ſet up for the Duke and the chief Citizens, where, when they were come they might ſit to ſee the ſhooters appointed to ſhoot at the butt new ſet up for the ſame, being ſeven ſcore and eight yards from the other end of the tent. The true number of archers that ſhot, was thirty hundred: the number that accompanied him into the field, of archers, citizens, whifflers, and thoſe which guarded them with bills, was forty and one hundred and odd perſons, beſides Pages and Henchmen, which was in number three hundred and odd. The attire worn by all this company (for the moſt part) was very gorgeous; ſome in black velvet jerkins, doublets of ſatin, with hats of velvet; the moſt part in ſatin and taffety, and hats of taffety, a great many wearing chains of gold. The true number of chains of gold worn among the company, that I ſaw, was nine hundred forty two; the

Digitized by Google

the reſt of the company did all wear green large ſcarfs, ſome white ſcarfs, other ſome green ribbons, orange tawny ribbons, ſome black and white, green and white, but the moſt part was green.

Before they came to the tent, the train marched about the field in warlike manner, and forthwith caſt themſelves about and broke their ray, every one haſting to the tent where the Duke purpoſed to begin ſhooting. Then every enſign brought in his archers, and there with ſound of trumpets proclaimed by the herald, that every man ſhould avoid forty foot from each ſide of the butt; otherwiſe to ſtand to their own perils. Thus went they to ſhooting, where by then three enſigns had ſhot, which was about three of the clock; word was brought to the Duke, that certain of prince Arthur's Knights were coming into the field, deſirous to ſpeak with his nobleneſs. Having anſwer that they ſhould be entertained courteouſly: forthwith the Goldſmiths made forth to meet them, ſtaying at their own ſtake againſt their coming, who anon came, and then the Goldſmiths enſign, and ſome of their Pages very orderly, with ſome of the archers in chains of gold, went and met theſe courteous Knights, mounted upon ſtately palfreys, with ten Pages alſo on horſeback, and Iriſh lackies with darts running by their horſes on foot, beſides a trumpeter, a herald, and a meſſenger, upon good geldings: the Knights were apparelled in cloth of tiſſue, or crimſon ſilk and gold; their Pages in green ſilk; having likewiſe a ſeemly company of archers very richly apparelled in ſatin doublets and chains of gold, to the number of two hundred, attending on foot, half going before, the reſidue coming behind. (A worthy ſhow beſeeming ſo noble a game). Thus with great reverence they came near to the tent; the meſſenger clad in a jacket of black velvet, with a black velvet cap,

Digitized by Google

cap, and green ſatin doublet, pronounced an oration to the Duke: the copy thereof followeth.

"Moſt noble Duke, firſt to your good ſelf and next "unto all your worthy ſociety and company in general; "I in the behalf of the moſt noble and renowned "Prince Arthur, and all his noble Knights, gratify you "(and yours) with the choice of a thouſand commen- "dations: fame blowing abroad, and in the court of "the noble Prince Arthur, that this day (in this place) "ſhould be practiſed the moſt excellent quality of "ſhooting in the long-bow. Which news were no "ſooner blazed in that moſt royal court, but by the "conſent of their renowned Prince, theſe noble Knights "mounted themſelves on horſeback, calling to mind "the great courteſy they received of your nobleneſs, "at the late royal ſhow of their famous Prince. For "requital of which your great friendſhip, this troop of "noble Knights (for the honour they owe to the long- "bow) are repaired hither to preſent unto your noble- "neſs a friendly gift; which is; five bows of gold, "and five ſilver arrows; requiring your nobleneſs to "beſtow them on five of the moſt valiant, moſt active, "and moſt expert of all your train, in ſhooting in the "long-bow, requeſting (friendly) we may preſently "ſee the delivery of them to thoſe perſons moſt worthy: "hoping you will accept theſe their friendly gifts, "ſpringing from well-willing minds. Loth to hinder "your worthy exerciſe, we omit for expence of time, "that which elſe more largely ſhould have been diſ- "courſed. Theſe actions being finiſhed (we preſume "of your courteſy) we ſhall depart friendly, always "wiſhing the proſperous ſucceſs of your worthy exer- "ciſe."

The Duke with hearty thanks accepted theſe their preſents, promiſing with great proteſtation to match the prince

Digitized by Google

prince every way in good will and courteſy, wiſhing that this their amity might long continue.

Then the Knights departed with great grief to the duke, becauſe he had provided a banquet for them, which could not be ſerved in by reaſon of the unrulineſs and throng of the people.

The Marquis Barlo, chief of the Goldſmiths, to gratify them with ſome ſhow of courteſy, beſtowed on them two ingots or wedges, one of gold the other of ſilver, and after did conduct them into their own liberties with a volley of ſhot, which they very thankfully accepted.

And this one thing is worthy of memory, that upon the day of Prince Arthur's ſhooting, which was five weeks before this ſhow, the Duke willing to beautify the ſame in ſome ſeemly ſort, ſent a buck of that ſeaſon by the Marquis Barlo, accompanied with many Goldſmiths, who coming in ſatin doublets and chains of gold about their bodies, with horns at their backs, did all the way wind their horns, and preſented the ſame to Prince Arthur, who was at his tent, which was at Mile-end green; he not only accepted the ſame, but alſo promiſed to have the Duke's courteſy in mind, if God lent him life.

Having now digreſſed in brief, I will return to the Duke, who ſeeing the night draw on, broke up the ſhooting until the next day, which was Wedneſday, where they all met again, to try who could depart victors of thoſe games then to be won. Which were in value as followeth; the firſt fifty three ſhillings four pence, the ſecond five nobles, the third four nobles, the fourth twenty ſhillings, and the fifth ten ſhillings. Thus every one having one ſhot at the Butt, the beſt five were young men; four of the beſt games did the Earl of Pancridge's men win; the fifth one of the Duke's men did get.

Digitized by Google

get. The beſt and the ſecond were won by two of S. Dunſtan's in the Eaſt; the beſt was a ſkinner's man, the ſecond a brewer's man: and he that won the firſt did dwell in S. Bride's pariſh, being a ſadler's ſon, all which three were brought home in this manner. Firſt, for that it was dark, they were brought out of the field with torch lights to the number of two hundred, and the winners mounted upon great geldings, ſent to them from out of thoſe parts where they dwelled, very ſumptuouſly trapped with cloth of ſilk, and ſilver, and another of gold, with eight trumpets, drums and enſigns, with ſhot, which came from Fleetſtreet to fetch them home: and others with halberds ſafely to conduct them, they all three were clad in green; the firſt in green taffety, with a white ſcarf about his body, and a great chain of gold about his neck, with a cap of velvet, and a golden band about the ſame, bearing an arrow in his hand, and a green ribbon hanging thereat; and ſo had they all: to their great laud and honour were they conducted firſt into Grubſtreet, then entered the City at Cripplegate, down Woodſtreet, and ſo into Cheapſide: continual ſhot was beſtowed to bring them home, to the great delight of the beholders: thus marching through Paul's Church-yard, they went to Ludgate, and ſo home, where their trains was very thankfully received. Againſt they came home, there was prepared great banquets by their Maſters and Parents, to the great delight of that pariſh where they dwelled, who would not for money have loſt the honor of the ſame.

Then did the Marquis Barlo with all the Goldſmiths and his convoy of men at arms (8) ſafe conduct the Duke home to his houſe, appointing one Jeffery Gates

(8) Norwich and Savage, both notable for ſhot in this train.

an

Digitized by Google

an ancient ſervitor to them, to be the leader, who marched in the forward until they came to the Duke's houſe, where the Duke was no ſooner entered his houſe, and the Marquis, together with the chief of the train, but the harquebuſſeers, at the appointment of Gates, charged their pieces, and forthwith did beſtow ſuch a volley of ſhot, as cauſed the glaſs to ſhake forth of the glaſs windows; to the honour of the Duke, and the good liking of them all.

Then every Baron and the whole company of Governors were brought home to their joy and comfort, making good cheer, ſhooting off their pieces, ſounding of trumpets, and ſtriking up of their drums to delight and comfort.

Thus have I (as perfectly as I may) deſcribed the manner of the ſame, reporting the truth of what I ſaw. Then on the Monday following, the Duke had provided a ſumptuous feaſt, to which all the archers came, being kept at the Biſhop of London's Palace, who for the good will he bore to ſhooting, lent them his houſe freely, wiſhing that it might be as commodious to them, as the ſhow and ſight, for proviſion of ſo many citizens in his houſe was comfortable to him. And for fear of diſorder, there was unto every archer given a token ſtamped with a broad arrow, who, at the gate of the Biſhop's palace, delivered them to thoſe that were appointed to receive them.

Which done, every man (for the moſt part having ribbons about their necks) went to thoſe tables, which by good foreſight were provided for them, every man taking his place until the ſervice was brought in; the tables furniſhed before with table cloths, ſalt, bread, and trenchers. The great hall of the palace was filled, and over the heads of the people hung the moſt ſumptuous Enſigns, under which they were before conducted

Digitized by Google

to the field. There might a man behold the great proviſion of meat, the cooks in ſuch good order dreſſing the ſame in quiet ſort, as was worthy noting. And when the ſervice of meat was brought in, the trumpets ſounded, the drums ſtruck up, and every man in very good order placed to their contentment; ſo that the great hall, the largeſt parlor, the galleries, and other rooms in the houſe were filled with people, who with great rejoicing gave thanks to God for his providence and bleſſings, many ways beſtowed on them. Then was there ſerved unto one large table, which was the higheſt table in the great hall, boiled capon, roaſted beef, veniſon paſties, cuſtard, tart, roaſted capon and rabbits, with other diſhes neceſſary for the time, with wine, beer, and ale, and ever was repleniſhed with ſufficient thereof to their contentation.

The reſt of the tables had this ſervice to every meſs. Firſt boiled mutton, roaſted beef, a paſty of veniſon, and a roaſted capon; and ſome had rabbits, beſides beer and ale which was ſufficient, every meſs had a bottle of wine ſerved in a bottle unto the ſame: there were three hundred meſſes of meat ſerved in, to the great joy and comfort of thoſe that were there, being ſerved in ſuch good order as is laudable. When the meat was ſerved in, every man familiarly drank one to another; and then the Duke very reverently drank to them all, whereat the trumpets ſounded, the people hallooed, the drums ſtruck up, and ſuch a noiſe was made that it was heard far off. Then the Duke, with ſome of his Knights and gentlemen, went about the whole houſe, and viſited every table, with drum and fife, to the well liking of them all; ſo that with much melody they came in again into the great hall, giving thanks to the whole company. Then ſundry times the trumpets ſounded, the drums ſtruck up, and the company drank to the Duke,

paſſing

Digitized by Google

paſſing away the time until dinner was ended. Then another company did wind their horns, which in good order of meaſures they did. The people by this time beginning to depart, the Duke cauſed the Herald to ſtand up and make a proclamation, that the people might be ſilent; which done, he pronounced in a ſhort ſentence, a thankſgiving to God for our gracious Queen, deſiring God to ſend her long life and victory over all her enemies; whereat the people cried Amen; lifting up their caps, heaving up the tables over their heads, in ſign of joy of her Majeſty, whereat the trumpets ſounded, the company hallooed and ſhouted. Laſt of all they praiſed God and ſo departed; giving the remnant of the broken meat to the poor and needy, of which company a number gave diligent attendance for the ſame at the great gate. (A charitable deed in the knitting up of ſo honourable a matter.) Thus they declared their courteſies one to another, to the maintenance of Chriſtian unity, which I pray God long continue, that this her Majeſty's realm of England may be kept ſtill in peace and tranquility, to the maintenance of God's Glory, the fame and perpetual renown of her Majeſty; whoſe life, the God and giver of all life prolong, that our lives, which depend upon hers, may the better be preſerved and continued. *Amen.*

Digitized by Google

Digitized by Google

A BRIEF

DESCRIPTION

OF THE

SHOW

MADE AT

S. MARTINS in the FIELDS,

IN SETTING UP HER

MAJESTY's STAKE.

ON Wedneſday, being the ſecond day of October laſt paſt, ſtanding at a ſtall in the Old Baily, I heard the ſound of drums and guns, and drawing near to ſee it, there came Whifflers with ſtaves, red and white, with a luſty company of good archers, very well and ſeemly apparelled, bearing bows and ſhafts; every archer his page, clothed in red Mandilion, ſtriped with ſilver, and caps agreeable to the ſame. There came in number two hundred bowmen, mixed with two hundred calivers, beſides halberds, to beautify the ſhow, mixed throughout. The gunners were expert fellows, diſcharging their ſhot in very good order: all this train going under ſundry fair enſigns. Forth-

Digitized by Google

with the trumpets ſounded, and a very fair ſhow followed. Firſt, men very ſtrangely apparelled in long hairy garments, made of ſkins like unto martens, hopping and ſkipping along as they went: then came two horſemen harneſſed, their horſes all over trapped in white ſilk: then came a very ſumptuous Stake, being the Queens Majeſty's, which they went to ſet up in S. James's Field; upon this ſtake ſtood a golden lion holding a ſhield with her Majeſty's arms, the ſupporters whereof were Fortitude, Juſtice, Temperance, and Prudence, the lion having a whole crown on his head. Then came a ſeemly Pageant, very cunningly made and with great coſt, wherein ſat the Gods; firſt, Pan, with Fame and Honour, attending on Vertue; then Saint Martin, and Eliza, as ſuperior, accompanied with the Four Virtues; the Muſes attending very ſeemly with muſick playing before the Pageant. Thus they paſſed very orderly through Holborn to Chancery-Lane, and ſo to S. James's in the Fields: in the train was carried three ſilver games as reward for the winners of ſhooting in the long-bow, and a gilded gun, as a reward unto the beſt that could handle their piece. (Both exerciſes of great ſtrength unto this realm). They uſed many ſpeeches in their train as they went. And, at night were brought home very worthily with fire-works, which greatly beautified the ſame. To conclude, never ſaw I a fairer ſight upon ſuch a ſudden, which being worthy of commendation, I thought good to note the principal things therein, that it might remain in memory to their continual praiſe.

A BRIEF

Digitized by Google

A BRIEF

RELATION

OF THE SEVERAL

APPEARANCES

OF

ARCHERS

SINCE HIS

MAJESTY's RESTORATION.

ON March the 21ſt, *anno Domini* 1661, Four hundred archers, with their bows and arrows, made a ſplendid and glorious ſhow in Hyde-Park, with flying colours, and croſs-bows to guard them. Sir Gilbert Talbot Baronet, was their Colonel, Sir Edward Hungerford, Knight of theBath, their Lieutenant Colonel, Mr. Donne was their Major. Great was the appearance both of the nobility, gentry, and commonalty: ſeveral of the archers ſhot near twenty ſcore yards within the compaſs of a hat with their croſs-bows; and many of them, to the amazement of the ſpectators, hit the mark; there were likewiſe three ſhowers of whiſtling arrows. So

Digitized by Google

great was the delight, and ſo pleaſing the exerciſe, that three regiments of foot laid down their arms to come to ſee it.

Yet as delightful as it then was, this exerciſe was intermitted by ſome unlucky neglective fate, from the year 1661, till 1675; and then indeed they began to ſtring their bows and handle their arrows for a handſome appearance to compliment Sir Robert Vyner, then Lord Mayor: their rendezvous was in the upper Moor-fields: there, about three hundred and fifty, moſt richly habited, were drawn up in a body; from thence they marched through Moorgate, through Cripplegate, and through Woodſtreet into Cheapſide; then they paſſed by the north ſide of Saint Paul's, and marched round it into Cheapſide again, and ſo to Guild-hall, where they waited to receive the King's moſt excellent Majeſty, and the then Lord Mayor. When the King had paſſed by (who ſeemed highly pleaſed with the ſight of ſo many archers) then they marched to Chriſt-Church, where a very noble dinner was prepared for them at the expence of the Lord Mayor: Sir Robert Peyton Knight, was their leader, and Mr. Michael Arnold was their bringer-up: they marched under one colour, ſix men with croſs-bows being appointed to guard it: all the officers had green ſcarfs, and every bowman wore a green ribbon. There was not any thing more material to be mentioned in that day's march.

Upon the 26th of May following, the archers marched to Tuttle-fields to ſhoot their whiſtling-arrows. They rendezvouſed in the Military-Ground near Bloomſbury, and marched from thence through part of Holborn, through Chancery-lane, through Temple-bar, and ſo through the Strand to Whitehall. There were ſix abreaſt, yet when the van reach'd Whitehall, the rear had not paſſed through Temple-bar, ſo numerous where the archers then; from Whitehall directly

Digitized by Google

directly to Tuttlefields aforeſaid. When they were drawn up in a line, then came the King with his guard and coaches of ſtate, together with his Royal Highneſs, the Duke of York, the Duke of Monmouth, and moſt of the nobility attending him; to ſee them ſhoot: His Majeſty marched twice or thrice from one end of the body to the other to view them. The archers were in number near a thouſand; the ſpectators near twenty thouſand. It was a great encouragement, and a mighty joy and ſatisfaction to the archers, to ſee the King behold them with ſuch a ſerene, benign, cheerful, princely and favourable countenance: His Majeſty was pleaſed to ſtay an hour or two to look on, whilſt they ſhot ſeveral ſhowers of whiſtling arrows to entertain him, with which his Majeſty, and the Nobility, ſeem'd very much ſatisfied; then the King was pleaſed to return to Whitehall: then Sir Gilbert Talbot ſent in ſeveral barrels of beer, and other proviſion for the archers; ſo did Sir Edward Hungerford, Sir Robert Peyton, and the reſt of the Captains; after they had refreſhed themſelves, then they marched home with drums beating, and colours flying. Sir Gilbert Talbot being the Colonel; Sir Robert Peyton, Lieutenant-colonel; and Michael Arnold, Major.

In the year 1676, on St. Simon and Jude's day, Sir Joſeph Sheldon being elected Lord Mayor, about 350 archers marched under the command of Sir Robert Peyton, Knight; they rendezvouſed in the upper Moorfields, and marched as before mentioned in the time of Sir Robert Vyner's mayoralty, and were in the ſelf ſame manner placed to receive the King and Queen, the nobility and gentry, who came to honour the Lord Mayor with their preſence at dinner at the Guild-Hall: When his Majeſty was paſſed by, then they marched to Chriſt-Church to dinner. Amongſt the variety of

ſights,

Digitized by Google

ſights, none ſeemed to give his Majeſty more content and delight, more pleaſure and ſatisfaction, than to ſee the bows and arrows, theſe ancient habiliments of war, revived.

On the 14th day of July, 1681, the archers marched from London to Hampton-Court, under the command of Mr. Edwards and Mr. Henry Warren: that was a day appointed to ſhoot for ſeveral pieces of plate, worth thirty pounds, at eight ſcore yards diſtance. After a little time was ſpent, the King was pleaſed to honour them with his preſence, and ſtay'd near two hours to behold their paſtime, to the great joy, ſatisfaction, and honour of the archers: and as though this had not been honour enough, ſo full of goodneſs and clemency was his Majeſty, that he permitted as many of them as pleaſed to kiſs his hand, in token of his being well ſatisfied with that heroic exerciſe; the prizes were two ſilver cups, and three dozen of ſilver ſpoons. The ſaid target was placed upon a Butt, erected on the green, before the King's Palace there; but it rained ſo faſt that the King was forced to retire before all the prizes were won, which were thirty in number; he ſtayed till ſix were won, and expreſt his ſatisfaction very much; and without all queſtion the archers may reaſonably hope for what favour they can humbly beg for the encouragement of archery from this King, and it will be granted with as much readineſs as by any of his royal anceſtors in the like caſe whatſoever heretofore; for no King, unleſs his glorious Father, could ever match his goodneſs.

POST-

Digitized by Google

POSTSCRIPT.

ON Friday the 21ſt of April, 1682, the archers met in the Artillery-Ground, marching through Cornhill, Fleet-Street, and the Strand, to Tuttlefields. The chief officers were Sir Edward Hungerford, Knight of the Bath, Colonel; Mr. Michael Arnold, Lieutenant Colonel; Mr. John Edwards, Major; Mr. Henry Warren Captain Lieutenant; Mr. Edward Gough, Mr. Edward Done, Mr. George Walker, Mr. James Manley, Captains; John Jennings, Lieutenant. The King's moſt excellent Majeſty, his Royal Highneſs, and moſt of the nobility, were ſo favourable as to honour them with their preſence; as likewiſe the Ambaſſador of the Emperor of the kingdom of Morocco and Fez: there were at leaſt a thouſand archers in the field; for now gentlemen begin to be pleaſed with the divertiſement, and pleaſed with this manly recreation: There were three ſhowers of whiſtling arrows; ſuch a ſight, ſuch a noiſe, and ſuch an appearance, it's preſumed was never ſeen in England on the like occaſion; yet we hope that every year will beget new lovers of this profitable and harmleſs exerciſe, for they are now reſolved, at leaſt once or twice a year, to make ſuch a public appearance, if his Majeſty will be pleaſed to permit them.

FINIS.

Digitized by Google

Digitized by Google

A

GLOSSARY

OR

EXPLANATION OF THE TERMS

MADE USE OF IN

ARCHERY.

A

ALLOW, } An archer is ſaid to *allow*, or make *allowance*
ALLOWANCE, } for the wind, when he ſhoots ſomewhat wide of the mark, and on that ſide of the mark neareſt the wind, in order that the wind may bring his arrow into the line of the mark.

ARROW *barbed*—A war-arrow, having the head armed with barbs or wings (by the poets called *beard*).

——— *bearing*—An arrow which poſſeſſes a ſteady flight.

——— *bob-tail'd*—An arrow encreaſing in bulk, in a regular proportion, from the nock to the pile.

——— *breaſted*—An arrow which is largeſt in the *middle*: alſo termed *high-cheſted*.

——— *broad*—A war-arrow with a flat barb, ſometimes called a *ſwallow-tail'd* arrow.

——— *bullet*.—An arrow made for throwing a bullet.

——— *fiſhing*—An arrow uſed for ſtriking fiſh.

——— *butt*—An arrow uſed in ſhooting at ſhort Butts.

——— *fluted*—An arrow which is *indented in lines* to prevent its caſting.

ARROW

Digitized by Google

ARROW, *ruſh-grown.*—An arrow formed like a ruſh.

——— *ſheaf.*—A war-arrow carried in a ſheaf. Sometimes by the poets called a *field*-arrow.

——— *ſhot.*—An arrow uſed for caſting ſmall ſhot.

——— *taper-ſhaped.*—*See* Arrow *bob-tail'd.*

ASCHAM.—A wooden caſe in which bows are kept.

B.

BACK *of a bow.*—The exterior ſide of a bow.

BELLY *of a bow.*—The interior ſide of a bow.

BELT.—A ſtrap furniſhed with a *Well* and worn round the waiſt, in which the arrows for immediate uſe are placed.

BEND *of a bow.*—The ſpace or ſpan between the bow and the ſtring, when the bow is bent or braced.

BLAZON.—A target uſed in Flanders: the face of which is divided into ſquares, each ſquare having a number.

BLACKS.—Black or dark marks.

BOUGHT.—A Twiſt or turn.

BOW *arm.*—The arm employed in holding the bow.

——— *back'd.*—A bow, the back of which is a *diſtinct* piece *glued* upon the belly.

——— *bearing.*—A bow that caſts an arrow well.

——— *hand.*—The hand which holds the bow.

——— *ſhot.*—The diſtance which an arrow flies from a bow.

——— *ſtave.*—A ſtave of wood, cut ready for being ſhaped into a bow.

BOWYER.—A bow-maker.

BRACE, *to.*—To bend a bow, by putting the ſtring into the upper horn. A bow is ſaid to be *high* braced, when the ſtring is far from the belly: on the contrary, when near the belly, it is ſaid to be *low* braced.

BRACER.—A guard worn on the arm to prevent the ſtring, in its return, from hurting the arm.

BUTT.—A mound of earth, upon which a mark to ſhoot at is placed.

——— *ſhooting.*—Shooting at Butts, or marks placed on Butts.

——— *arrow.*—*See* arrow.

CAST

Digitized by Google

C.

CAST, *to.*—To caſt, is to become warped. This word is alſo uſed to expreſs the operation or ſpring of a bow; as a bow of quick or ſlow *caſt.*

——— *the.*—The right of ſhooting the firſt, by winning at the laſt ſhoot; which is called *getting the caſt.*

*CHRYSAL.—A kind of pinch (in form like a canker-worm) in a bow.

CLOUT.—A ſmall white Target placed near the ground.

——— *ſhooting.*—Shooting at clouts.

COCK-*feather.*—That feather on the arrow, which has no one parallel to it; and which ſhould be *uppermoſt* when the arrow is placed in the bow.

COME, *to.*—A bow is ſaid to *come*, when it *ſinks* or *bends too much* in any part.

COME *round, to.* } A bow is ſaid to *come round*, or to *come*
COME *round compaſs, to.* } *round compaſs*, or *in compaſs*; when, in drawing, it forms a proper curve or circle.

COMPASS, *to keep.*—To obſerve due elevation.

——— *to ſhoot.*—To ſhoot *compaſs* or a *round compaſs*, is to ſhoot the arrow in a curved or parabolic line.

CROW-*bill.*—A *horn* pile.

CROWN-*clod.*—An ornament placed upon the Butts.

CUT *the mark, to.*—An arrow is ſaid to *cut* the mark, when it flies ſtraight towards it, but falls *under* it.

D.

DEAD-*ſhaft.*—A heavy dull ſhaft.

DOWN-*wind.*—*See* wind.

DRAWING.—That act in ſhooting (by drawing the ſtring), which immediately precedes looſing.

* This word (which is not to be found in Aſcham) may poſſibly be the ſame as *chryſalis*, a caterpillar in the worm ſtate: a fret ſomewhat reſembling that animal; and indeed Aſcham obſerves, "that frets are very ſimilar to *a canker, creeping and increaſing.*"

DRAWING

DRAWING *arm.* { *The arm* / *The hand* / *The fingers* } employed in drawing the bow.

——— *hand.*

——— *fingers.*

——— *through the bow.*—Is drawing ſo far, that the *point of* the arrow comes beyond the *belly* of the bow.

——— *a feather.*—Is ſlipping it from off the quill.

E.

ELEVATION.—The act of raiſing the bow in ſhooting at the mark: generally oppoſed to a *point blank* level.

END.—The place where a mark is fixed.

——— *double.*—A ſhoot from one mark to another and *back again.*

EYE *of the ſtring.*—That part of it, which occupies the *upper* horn of the bow.

F.

FAST.—A word uſed to caution perſons from paſſing between the ſhooter and the mark, and to direct them to ſtand ſtill.

FLETCHER.—An arrow-maker.

FLIGHT.—The *diſtance* or *path* in which an arrow *flies.*

——— *A.*—An arrow uſed in flight-ſhooting.

——— *ſhooting.*—Shooting with the lighteſt ſort of arrows (called flights) and the greateſt diſtances.

FLUTED-*arrow.*—*See* arrow.

FOLLOW *the ſtring.*—A bow is ſaid to *follow the ſtring*, when by uſe, it has loſt its original ſtraightneſs; and has obtained a curve or inclination *forwards.*

FOOT *and pole.*—(In meaſuring a ſhoot). The *bole* of a tree from the top to the root.

FOOTING.—The manner of placing the feet in ſhooting.

FOREHAND.—*See* Overhand.

——— *ſhaft.*—An arrow ſhot over-hand.

FRET.—Is that part of wood which is corroded or eat away. But in archery, this word is chiefly uſed to ſignify that riſing or protuberance which is occaſioned in ſome weak woods, by the ſtrain they receive in bending. Frets (ſays Aſcham) are little *pinches.*

GARLAND,

Digitized by Google

G.

GALL.—*See* Knot-gall.

GAME, *in.*—In good ſhooting.

GARLAND.—A wreath, within which (in ancient times) the mark was placed.

GONE.—An arrow is ſaid to be *gone*, when it may, from its flight, be judged to fall *wide* of, or *far* from, the mark.

GREASE POT.—A ſmall box, ſomewhat bell-ſhaped, open at the mouth, and containing the compoſition uſed in lubricating the fingers of the ſhooting-glove.

H.

HANDLE *of the bow.*—That part of the bow which is *held* in ſhooting.

HANG *on the ſtring, to.*—The Fingers are ſaid to *hang on the ſtring*, when they do not *looſe* it *ſmoothly*.

HARD *to ſtand in a bow.*—An arrow is ſo ſpoken of, when it flies from the bow *ſteadily*, and without flirting.

HEAD *(of a ſhaft), creſted.*
——— ———, *high ridged.*
——— ———, *ſilver-ſpoon.*
——— ———, *ſhouldered.*
—A pile having a circular ſwelling or prominency, forming the baſe of the Stopping, which is conical.

HE! HE!—This exclamation is ſaid to have been an archer's *word of call*, handed down from very ancient days.

HEAT. } A word uſed by bow-makers, to ſignify the tem-
HEATING. } pering of wood by means of fire.

HIGH-*feathered.*—An arrow is ſaid to be high-feathered, when the feathers are left *long* and *deep*.

HIT.—A ſtroke in the Target or Mark.

HOLDING.—The act of holding the *ſtring*, when the bow, in ſhooting, is fully drawn up. This word is, indeed, ſometimes applied to the bow.

Digitized by Google

HOME.—An arrow is ſaid to be drawn *home*, when it is drawn as far as it ought to be.

——— *at*.—An arrow is ſaid to be *at home*, when it falls upon, or not ſhort of the mark.

HORNS *of the bow*.—The *extremities* or ends, which are tipped with horn.

HOYLE.—A ſhort roving mark.

——— *ſhooting*.—Shooting at *Hoyles*.

I.

INCHES.—The Inches or diſtance allowed round the Butt-mark, in which an arrow muſt fall in order to count, when the *inches* are ſhot.

K.

KEEP *a length, to*.—To ſhoot the exact *diſtance*, although not ſtraight.

KNOT-GALL.—A preternatural *tumour* or *hurt* in trees, occaſioned to the bough or other part of a tree, by ſome other bough or tree rubbing againſt it.

L.

LAYING *a bow ſtraight*.—A term uſed by the Bow-makers, to ſignify the bringing it ſtraight by means of *heat* or *force*.

LENGTH.—The diſtance ſhot.

LIMB *of a bow*.—That part of a bow which reaches from each ſide of the handle to the horn.

LOOSE, *the* } —The act of letting go the ſtring, after it is
LOOSING. } drawn up.

LOW-*feathered*.—An arrow is ſaid to be *low-feathered*, when the feather is cut *ſhort* and *ſhallow*.

MARK.

Digitized by Google

M.

MARK.—The object ſhot at.

———, *roving.*—A mark ſhot at in roving.

MARKER.—The perſon who marks the fall of the arrow in the butt.

N.

NOCK.—This is the old way of ſpelling *notch*, which, in archery, is always ſpelt and ſounded *nock*.

NOCK, *to.*—To place the nock of the arrow in the ſtring.

NOCKING *point.*—That part of the ſtring on which the arrow is placed.

NOOSE.—That end of the ſtring which occupies the *lower* horn.

O.

OVER-*arrow.*—An arrow which flies *over* the mark.

——— *bowed.*—An archer is ſaid to be *over-bowed*, when the power of his bow is above his command.

——— *drawn.*—An arrow is ſaid to be *over-drawn*, when it is drawn too far.

——— *hand.*—An archer is ſaid to ſhoot *over-hand*, when he looks at his mark *over* his bow-hand.

OVER-HAND *ſhaft.*—An arrow that is ſhot over-hand.

P.

PAPER, *the.*—The Butt-mark.

——— *game.*—A game, in which no arrow is allowed to count which does not *touch* the paper.

PETTICOAT.—The *Face* or *Ground* of a Target beyond the *outer* colour.

PIECING *of a ſhaft*, *the.*—The wood at the *pile-end*, ſpliced or incorporated with it.

Digitized by Google

PILE.—The head of an arrow uſed in ſhooting at *marks*.

—— *roving*.—The pile uſed for *roving* arrows.

—— *ſugar-loaf*.—A pile in the form of a *ſugar-loaf*.

PIN.—The peg which faſtens the Butt-mark.

PINS.—Small knots in wood running frequently very deep, and ſometimes quite through it. They are very hard, and in ſome woods (as deal) may often be driven out.

PINCH.—A ſmall *Fret*.

PLUCK *a ſhoot, to*.—To retard or deaden a ſhoot.

——— *down aſide, to*.—To ſhoot into the ground on one ſide.

——— *buffet*.—A game mentioned in the *Garland*, which entitled the Victor, inſtead of receiving a prize, to give the Vanquiſhed a *buffet* or blow on the cheek.

PLUCKING *a feather*.—Raiſing the feathers when they are ſunk.

POINT.—(Probably ſignifying Pile.) A meaſure in piecing an arrow.

——— *blank*.—The *White* (Mark), at which an arrow is ſhot. Now uſed to expreſs an *horizontal* ſhot.

POPINJAY.—A mark in the ſhape of a bird.

PREFERENCE.—One limb of a bow is ſaid to have the *preference* of the other, by bending *moſt*.

PRICK *mark*.—The white Mark or Target ſhot at.

PRICKING. } —Shooting at prick Marks.
PRICK-*ſhooting*. }

PRICKS.—The place where the pricks or marks are placed.

——— *ſhaft*.—An arrow uſed in prick-ſhooting.

PRICKER.—The needle or inſtrument with which the target card is pricked or marked.

Q.

QUIVER.—A caſe in which arrows are carried.

R.

RAISE *a pin, to*.—A pin in a bow is ſaid to be *raiſed*, when there is wood left around it forming a prominency.

RINGMAN.

Digitized by Google

RINGMAN.—The third finger or that upon which the wedding-ring is placed.

ROOD, *a.*—Seven yards and a half.

ROUND-*compaſs.*—*See* compaſs.

ROVERS.—Caſual marks, or marks of *uncertain* diſtance.

ROVING.—Shooting at rovers.

——— *arrow.* } A arrow,
——— *bow.* } A bow,
——— *pile.* } A pile, } uſed in ſhooting at Rovers.

RUN *on the bow, to.*—A feather is ſaid to *run* on the bow, when it is placed ſo far out of its proper line, as to rub againſt the bow in ſhooting.

S.

SADDLE-*back'd*—A feather is ſaid to be cut *ſaddle-back'd*, when it is cut in the ſhape of a ſaddle.

SCORE, *a.*—Twenty yards.

SELF-*bow.*—A bow formed out of *one* piece of wood.

SET *the ſhaft in the bow, to.*—To pull the ſhaft ſo far, that the point touches *the belly* of the bow.

SHAFT.—An arrow: properly ſo called when it wants only the *head.*

SHAFT-*arm.* } The arm,
——— *hand,* } The hand, } employed in drawing the *arrow.*

———, *gadding.* }
———, *ſcudding.* } A ſhaft that { *ſtarts* from the bow. *ſkims* upon the wind. *that* flies *unevenly.*
———, *hobling.* }

———, *hollow.*—A ſhaft made of very light, porous or ſpongy wood.

SHAFTMENT.—That part of the arrow occupied by the *feathers.*

SHAKE.—A longitudinal crack, concuſſion, or rent in wood, often cauſed by the force of the wind.

SHEAF *of arrows.*—A quiver or caſe of arrows uſed in war, conſiſting of twenty-four.

SHOOT, *a.*—An arrow ſhot.

——— *down the butts, to.*—To begin at the *furtheſt*, and end at the *ſhorteſt* butt.

SHOOTING

Digitized by Google

SHOOTING-*glove.*—A glove uſed on the *ſhaft-hand* in drawing the String.

SHORT *arrow.*—An arrow which falls *ſhort* of the mark.

SHOULDER *of the pile.*—The riſing or prominency near the point.

SIDE *wind.*—*See* wind.

SINKING *a bow.*—The act of reducing the *ſpirit* or *ſtiffneſs* of a bow, by ſhooting in it with heavy arrows.

SNAKE, *to.*—An arrow is ſaid to *ſnake*, when it has worked itſelf under the graſs.

SPELL.—A riſing of the lamellæ or ends of the *grain* of the wood of which a bow is made.

SPRING *of a bow.*—The elaſtic quality of a bow.

STAND *in the bow, to.*—An arrow is ſaid to *ſtand*, (or to ſtand *in*) a bow, when it flies from it ſteadily, and without ſhaking or flirting.

——— *in the wind, to.*—To ſtand *acroſs* the wind.

STANDARD-*arrow.*—An arrow made according to a certain ſcale or pattern.

STANDING, *the.*—The poſture in which an archer ſtands, when he ſhoots.

——— *bow.*—A bow that ſtands well without ſinking.

STELE.—An arrow without feather or head.

STOPPING.—The extreme part or head of the pile, which is ſolid.

SUGAR-*loaf pile.*—*See* Pile.

SWIFT-*ſhaft.*—A ſhaft that flies ſwiftly.

SWINE-*back'd ſhaft.*—An arrow having the feather cut in imitation of the line of an *hog's back.*

T.

TAB.—A piece of flat leather, which lies on the *inſide* of the hand, and is uſed inſtead of the *fingers* of the ſhooting-glove.

TARGET.—A mark ſhot at, conſiſting of ſeveral circles.

——— *arrow.*—An arrow uſed in ſhooting at the Target.

——— *card.*—A card coloured as the Target, containing the names of the ſhooters at the Target, and on which are pricked the hits.

TARGET

Digitized by Google

TARGET-*ſhooting*.—Shooting at Target-marks.

TASSEL.—A bunch of worſted, uſed for wiping the arrows.

TILLER.—An inſtrument made of a ſtraight piece of wood, with a notch at the end, and notches on the upper ſide; in which a bow is placed and drawn, to ſee how it bends.

TILLERING.—Trying a bow by the tiller. Altering a bow by ſcraping it.

TO *the bow.* } —A man is ſaid to ſhoot, and his arrow is ſaid
—— *the ſhaft.* } to fly *to* the bow or *to* the *ſhaft*, as his arrow flies to the *bow-hand* or *ſhaft-hand* ſide of his mark.

UP, *too much.*—A bow is ſaid tobe *too much up*, when it is *braced* too high.

U.

UNDER-*bowed*.—An archer is ſaid to be *under-bowed*, when he uſes a bow too weak for him to ſhoot well with.

UNDER-*hand*.—An archer is ſaid to ſhoot *under-hand*, when he looks at his mark *under* his bow-hand.

UPSHOT, *to give the*.—To make the *preſumed* beſt ſhot, towards the end of the game.

UP-*wind*.—See wind.

W.

WEATHER-MAN.—An archer is ſaid to be a good *weatherman*, when he is converſant with the weather.

WEIGHT *of a bow*.—The weight or power which a bow requires to *draw* it up.

———— *of an arrow*.—The quantity of its bulk, aſcertained by weighing it.

WEN.—A callous *excreſcence* growing out of trees.

WHIP, *to*.—To inwrap.

WHIPPING, *the*.—The material uſed to inwrap the nocking point.

WHIST-

Digitized by Google

WHISTLING-*arrow*.—An arrow with a large round and hollow head (generally made of horn) perforated with holes, which makes a whiſtling noiſe as it flies.

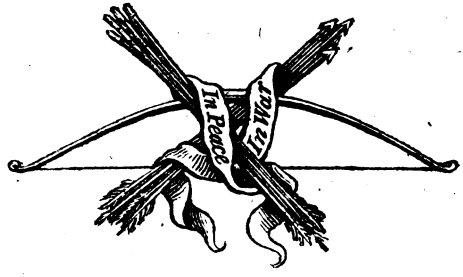
WHITE.—The *interior* circle of a paper-mark.

WIDE *arrow*.—An arrow which falls *wide* of the mark.

WIND, *down*.
———, *ſide*.
———, *ſide quarter*.
———, *up*.
} A wind which blows {
directly from the ſhooter *down* to the mark.
directly *acroſs* the line of the mark.
obliquely upon the line of the mark.
directly from the mark *to* the ſhooter.

WINDING *pricks*.—Prick-marks that ſtand aſkaunt.

WIND-*ſhake*.—*See* Shake.



Digitized by Google

ADDITIONS.

OF THE STRING.

PART IV. CHAP. IV. *Add*, The ſtring may be ſtretched, before it is put on the bow, by ſuſpending a *weight* to it.

OF THE NOCK.

CHAP. VI. Sect. 6. *Add*, Silver nocks have been uſed, and a broken nock has ſometimes been mended with an hollow tube of ſilver.

OF DRAWING.

CHAP. VIII. Sect. 6. The ſtring, in drawing, ſhould lie on or near to the *end-joint* of the fingers, which ſhould be ſufficiently bent to hold it, but not ſo much bent as to *retard* or *deaden* the ſhoot.

OF COLOURING THE ARROW.

Note 50. The arrow ſhould be firſt waſhed with water, in which *alum* has been diſſolved, this muſt be uſed *cold*. When the

Digitized by Google

the alum water has dried on the arrow; the black dye (which ſhould be boiled, and ſtrained off once or twice) may, when *cold*, be laid on the arrow, or the arrow may be dipped in it two or three times: (if it be uſed when *hot* the arrow will be liable to be *caſt*). Fine glaſs-paper will anſwer the purpoſe of removing the roughneſs left on the arrow by the dye, as well, or better than tripoli. To make the black deeper, the arrow may, after the roughneſs is removed, again be rubbed with a flannel which has been dipped in the dye, before it is oiled. Indeed the copal varniſh may be entirely diſpenſed with.

Digitized by Google

ERRORS.

Page.	*Line.*			
7	7	For England	read	*Britain.*
8	11	Engliſh	—	*Britons.*
	(*note* l. 9)	Macou	—	*Maſcou.*
10	23	Engliſh	—	*Britons.*
15	(*note* l. 32)	Barrington	—	*Arnott.*
21	1	Paralells	—	*Parallels.*
23	20	thining	—	*thinning.*
54	(*note* l. 14)	Corſelette	—	*Corſelet.*
63	17 and 18	Parentheſis to begin at *as*, and end at *expreſſes.*		
64	10	Statutes	read	*Statute.*
81	25	Saltzmann	—	*Salzmann.*
100	(*note* l. 13	Waiwoode	—	*Vaiwode.*
	15	Cantimer	—	*Cantemir.*
197	24	Hood	—	*Wood.*
	29	Howorth	—	*Haworth.*
111	(*note* l. 2)	atchieved	—	*achieved.*
112	8	Parentheſis to begin at *when.*		
	9	Ditto	at	*turning.*
113		Mr. H. Greene	read	*Mr. J. H. Greene.*
119	3	Dele ſemicolon after *effect.*		
163	(*note* l. 3)	Scythians	read	*Lycians.*
218	12	Strong ger	—	*Stronger.*
222		Dele all the inverted commas at the *laſt paragraph.*		
233	(*note* 46, l. 1)	Parentheſis to cloſe at *Archers.*		

Printed by C. Roworth, Hudson's Court, Strand.

Digitized by Google

M. L.

Digitized by Google

Digitized by Google

Digitized by Google

Digitized by Google

Digitized by Google

Digitized by Google